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ABSTRACT

This is the second of three volumes that constitute the final evaluation report of Project STAR (State Technical Assistance Resources), an undertaking of the Maryland State Department of Education designed to help 36 elementary schools improve their reading programs. This volume is divided into five parts. The first part contains a discussion of the evaluation design used in the project. The second, third, and fourth parts concentrate on one of the project's goals--the improvement of the organization and administration of elementary school reading programs--and details three studies that were undertaken to measure this goal: the Reading Achievement Study, the Standards for Successful Reading Programs Study, and the Teacher/Staff Perceptions Study. The fifth part focuses on another goal of the project--developing staff competencies to improve reading program content and program management capabilities--and details the Inservice Staff Development Study that was devised to measure this goal. The sixth part provides a summary of the evaluative study, including findings, conclusions, and recommendations. Appendixes contain copies of evaluation instruments used in the studies and a glossary of terms used in the report.
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AN EVALUATION OF THE PROJECT STAR READING PROGRAM INTERVENTION
(STATE TECHNICAL ASSISTANCE RESOURCES PROJECT)

Volume II: Evaluation
Final Report

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Maryland State Board of Education

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AN EVALUATION OF THE PROJECT STAR READING PROGRAM INTERVENTION

(STATE TECHNICAL ASSISTANCE RESOURCES PROJECT)

Volume II: Evaluation

Occasional Report

Final Report - July 1979



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ABSTRACT

This final report describes the results, analysis, and evaluation methods used to measure the effects of the Project STAR (State Technical Assistance Resources) Intervention on selected Local Education Agency and school reading programs in Maryland. The study was undertaken by the Division of Instruction, Program Assessment Branch in school year 1978-79, for the Maryland State Board of Education. The major evaluation problem addressed was to determine the impact of the Project STAR reading program intervention. Impact was measured in terms of (1) change in the reading comprehension grade equivalent of third and fifth grade students in participating schools; (2) the meeting of the Standards for Successful Reading Programs by participating schools; (3) changes in the perceptions of participating school staffs about their reading programs; and (4) the accomplishment of stated objectives for inservice staff development exercises conducted by Project STAR for participating LEA's school staff members.

To implement this evaluation an Instructional Program Partition, Evaluation, and Report System was constructed and applied to the Project STAR Intervention. The outcome of this application was a series of studies, namely, A--The Reading Achievement Study, B--The Standards for Successful Reading Programs Study, C--The Teacher-Staff Perception Study, and D--The Inservice Staff Development Study. Each of these studies is tied to a major goal of Project STAR. Results of the first three studies are discussed to respond to a set of program questions: (1) Did change occur? (2) How likely is it that the observed effect was the result of the Project STAR intervention? (3) Was the effect consistent enough and observed often enough to have made an impact on school reading programs? and (4) Did the effect have educational importance? In the last study, results are presented to answer the

questions: (1) Were objectives clearly stated? (2) Were objectives relevant to participant needs? (3) Were objectives supported by the presentation made? (4) Were objectives accomplished? A summary of results for educational decision makers is on the following page.

Project STAR Evaluation Questions and Responses For Educational Decision Makers

GOAL: To improve performance, organization, and administration of elementary school reading programs.	Question #1: Did change occur?	Question #2: How likely is it that the observed effect was the result of the Project STAR intervention?	Question #3: Was the effect consistent and observed often enough to have made an impact on reading programs, in schools, and on participants?	Question #4: Did the effect have educational importance?
A. Reading Achievement Study: Student Academic Performance Evaluation Study #1 Part Two of this report.	Yes. Six Year Longitudinal Analysis: for School Years 1973-74 to 1978-79 (N = 8). For third grade students, a small but noticeable change (increase) in the average G.E. scores occurred. Average G.E. scores (baseline data) for all schools considered were somewhat further away from the State average G.E. prior to the onset of Project STAR than when the intervention was operational. For fifth grade students, also a small but noticeable change occurred.	Uncertain. It is difficult to say that the performance change after the intervention (Project STAR) was due primarily to the treatment (Project STAR Process) or to some other intervention also operating in the schools. Also the sample size (N = 8) of schools is too small for any generalization to be made to the larger population of schools operating in Maryland.	Yes. The effect was observed often enough. Yes. The effect was consistent enough to say that the intervention had some impact on student performance. However, the degree of impact is unknown.	Yes. The implications drawn from the data might include: (1) the Project STAR intervention affected student performance indirectly, (2) the Project STAR benefited to some unknown degree the student performance in these schools.
	Yes. Three-Year Longitudinal Analysis for School Years 1975-76 to 1977-78. (N = 8). For third and fifth grade students, an upward trend in G.E. scores for these schools to the State G.E. average for Reading Comprehension was noticed. This change in the G.E. scores led to the six year longitudinal analysis mentioned above.			
	Yes. Same School/Student Body Comparison. School Years 1975-76 to 1977-78 (N = 8). Third grade student G.E. scores from schools participating in Project STAR when compared to these same student G.E. scores in the fifth grade showed little change--essentially remaining stable.			
	Yes. Second Year School Results For School Year 1976-77 (N = 26). Of the 51 school grades considered, the following changes occurred: For third grades, (N = 26), 69% (18 schools) showed an upward trend toward State average, 8% (1 school) remained stable, and 27% (7 schools) declined. For fifth grades, (N=25), 60% (15 schools) showed an upward trend while 12% (3 schools) remained stable, and 28% (7 schools) declined. In general, of the total number of grades considered, 65% (33 schools) showed an upward trend, while 8% (4 schools) remained stable and 27% (14 schools) declined.			

* (N = Number of Schools)

PROJECT STAR

Project STAR Evaluation Questions and Responses For Educational Decision Makers

GOAL: To improve performance, organization, and administration of elementary school reading programs.	Question #1: Did change occur?	Question #2: How likely is it that the observed effect was the result of the Project STAR intervention?	Question #3: Was the effect consistent and observed often enough to have made an impact on reading programs, in schools, and on participants?	Question #4: Did the effect have educational importance?
B. Standards (organization, and administration) Evaluation Study #2 Part Three of this report.	Yes. Validation and Revalidation Processes used on the determination of whether or not a standard has been met, suggest that change did occur from onset of Project STAR to its completion. Here, many of the standards were verified to have progressed from a state of not or partially being met, to a status of being completely met or almost met.	Quite Probable. The observed effect--a met standard--are closely tied to the interventions installed by the Project STAR Team and individual school staffs. For example, (1) installation of the standards as a guide to bring about reading program change; (2) the development and implementation of Project STAR Action Plans, and (3) the establishment and maintenance of a validation and revalidation monitoring system.	Yes. The effect--verification of a standard being met--was completed for each school twice during the maintenance phase of Project STAR. Also, validation of standards, indicators and program clusters suggest that impact was made in the school reading programs administration and organization aspects.	Yes. Staff responses to and actions taken indicate that the effect was educationally important.
C. Teacher/Staff perception study of reading standards and program clusters (organization and administration) Evaluation Study #3 Part Four of this report.	Yes. Staff perceptions about both the reading standards and program clusters suggest, by the pattern of trend shown that change did occur over the two year period from school year 1977-78 to 1978-79.	Quite Probable. The observed effect--changes in the Index value i.e. need to a strength or strength to a refined strength--indicate that school staffs saw progress being made in both the reading standards area and reading program cluster areas.	Yes. Staff perceptions on both standards and clusters was collected at two points in time. The information gained was adequate enough to suggest that school staff saw the Project STAR intervention as having made an impact on school reading programs.	Yes. Staff perceptions on data on both the standards and reading clusters suggest that the interventions undertaken by Project STAR were educationally important to school staffs. This observation is confirmed by the results found in the reading standard study.

* (N = Number of Schools)

Project STAR Evaluation Questions and Responses For Educational Decision Makers

GOAL: To develop needed inservice staff development activities in order to improve reading programs.	Question #1: Were inservice training workshop objectives clearly stated?	Question #2: Were inservice training workshop objectives relevant to participants needs?	Question #3: Were inservice training objectives supported by the presentation given at the workshop?	Question #4: Were inservice training objectives accomplished?
A. Inservice Staff Development Study #4 Part Five of this report.				
A.1. Content (Focus) Workshops (N = 14)	Yes. In thirteen (99%) of the fourteen (100%) Content workshops, participants maintained that each workshop(s) had clearly stated objectives.	Yes. The variety of professionals attending these workshops appeared to matter little, an average of 95% of the participants maintained that the workshop objectives were relevant to their needs.	Yes. On the average, 96% of those responding to this question felt that the performance given by workshop presenters supported the objectives.	Yes. On the average 97% of participants indicated that inservice training workshop objectives were accomplished.
A.2. Process Workshops (N = 10)	Yes. On the average, 97% of the participants indicated that each Process workshop(s) had clearly stated objectives	Yes. Here, an average of 91% of the participants indicated that the inservice workshop objectives were relevant to their own needs.	Yes. On the average 96% of those who responded on this item stated that the performance given by workshop presenters were tied to stated inservice workshop objectives.	Yes. Here, also on the average 97% of the participants involved in the process workshop indicated that workshop objectives were accomplished.
Total (N = 24)				

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AN EVALUATION OF THE PROJECT STAR READING PROGRAM INTERVENTION
SCHOOL YEAR 1978-79

INTRODUCTION

ORIGINS OF PROJECT STAR

In July 1976, the Maryland State Board of Education initiated Project STAR (State Technical Assistance Resources) to improve basic skills in ten schools in the state which scored among the lowest in the accountability program. The initial thrust of Project STAR was to focus on the improvement of each school's reading program and to achieve the Standards for Successful Reading Programs (Appendix A). Validation of the achievement of the Standards in each school was selected as one means of carrying out the Board's mandate.

In addition to the overall purpose of providing technical assistance and services to schools to improve achievement scores, Project STAR worked: (1) to provide participating local education agencies with a process model which would enable them to use the Standards to assess and redirect their reading programs, (2) to assist the local education agencies and selected schools in assessing their current reading programs, (3) to assist local education agencies in developing change plans for redirecting the selected schools' reading program, (4) to provide technical assistance personnel to help implement the change plans, and (5) to support designated schools as they achieved each Standard.

By June 1978, some 30 additional public schools had become participants in Project STAR. The LEAs and schools considered in this report are presented in Table 1.

PROGRAM ASSESSMENT CHARGE

In July 1978, two years after the original mandate, the Division of Instruction, Program Assessment Branch, was formally charged with the responsibility of making recommendations on Project STAR to the State

TABLE 1

Project STAR Participating Local Education Agencies and Schools

LEAs (N = 7)	SCHOOLS (N = 40)
<u>Anne Arundel</u>	Ferndale North Glen Ridgeway Severn Shady Side Solley Van Bokkelen
<u>Baltimore City</u>	Robert Coleman, #140 Curtis Bay, #207 Gilmore, #107 Dr. Bernard Harris, #250 Highlandtown, #237 Thomas G. Hayes, #102 Liberty, #64 James Monroe, #48 Montebelloe, #44 Rutland, #149 Tench Tilghman, #13 Harriet Tubman, #138 George Washington, #22 Waverly, #51 Carter Godwin Woodson, #160
<u>Calvert</u>	Appeal Central
<u>Charles</u>	Gale-Bailey Glasva Mount Hope Nanjemoy Wayside
<u>Howard</u>	*Guilford
<u>Prince George's</u>	*Bradbury Heights Brentwood Colmar Manor Dodge Park Edmonston Green Valley Kentland Sandymount Silver Hill
<u>St. Mary's</u>	*Frank Knox

* withdrew from Project STAR

Board of Education. These recommendations were to be based on the best available data that could be accumulated through an indepth, systematic Project evaluation conducted during school year 1978-79.

THE ORGANIZATION OF THE PROJECT STAR FINAL EVALUATION REPORT (VOLUME II)

In June 1978, Project STAR adopted the following four Title IV-C goals as being representative of its mission to improve the reading program in selected schools by providing technical assistance:

- Goal 1: To improve the performance, organization, and administration of elementary schools' reading program
- Goal 2: To promote interagency/interdisciplinary cooperation
- Goal 3: To develop an environment in which change can occur
- Goal 4: To develop needed competencies to improve reading program content and management.

Volume I of the Final Evaluation Report is essentially descriptive and covers Project STAR Goals 2 and 3. Volume I develops Project STAR, first, as a change-oriented delivery system showing how the change process was implemented on a school by school basis and, second, as a useful feedback mechanism to local education agencies and schools in the development of their reading programs.

This report (Volume II) provides both quantitative and qualitative information on Project STAR Goals 1 and 4. Volume II is divided into six parts. Part One discusses the evaluation design used in Project STAR out of which four evaluative studies were generated. In Part Two, Three, and Four the evaluation concentrates on Project STAR Goal 1--the improvement of student performance and the organization and administration of elementary schools' reading programs. Three studies were generated to measure this goal: (1) The Reading Achievement Study, (2) The Standards for Successful Reading Programs Study, and (3) The Teacher/Staff Perceptions Study. Part Five focuses on Goal 4 of Project STAR--developing needed competencies to improve school staff reading content and program management capabilities. The evaluation emphasis here culminated

in the Inservice Staff Development Study.

Each study is presented in a format that contains (1) a goal statement, (2) a method of evaluation that describes the subjects and participants involved as well as the instrument/procedure measures used, (3) the result and findings of the analysis, and (4) a discussion of results that is presented in a question and answer format.

Part Six provides a summary of this Evaluative Study including salient findings, conclusions, and recommendations. In addition, a glossary has been included to acquaint the reader with the operational definitions used throughout this evaluative report. Finally, a separate Executive Summary of the Project STAR Evaluative Report (Volume II) has been prepared and will be distributed to a variety of audiences.

PART ONE

PROJECT STAR EVALUATION DESIGN: A SYSTEMS APPROACH

GENERAL

Evaluation is closely related to several other terms with which it is often associated and generally confused--terms like *research*, *assessment*, *measurement*, and, of course, *accountability*. *Evaluation* is also one of those words which has taken on many meanings. In an attempt to resolve the confusion, the Joint Committee on Standards for Educational Evaluation was established and charged with developing standards for evaluations of educational programs, projects, and materials. The general purpose of the Standards for Evaluations of Educational Programs, Projects, and Materials, now in its final revision stage, is to set forth a set of principles and constructive recommendations which, if followed, should aid in the development and execution of sound evaluation procedures.

The Program Assessment Branch in its attempt to provide evaluative services to the Division of Instruction and other Divisions within the Department of Education adopted and has begun to utilize the Standards for Evaluations as a guide for its own evaluation activities.

Overall, four important attributes were used to guide the evaluation of Project STAR: Accuracy, Utility, Propriety, and Feasibility.

Accuracy: The evaluation is aimed at producing sound information. This attribute is concerned with describing the following evaluation components: Context, Information Sources, Purposes and Procedures, Measurement, Systematic Data Control, Analysis of Quantitative Information, Analysis of Qualitative Information, Conclusions, and Objective Reporting.

Utility: The evaluation is aimed at providing timely and informative data to decision makers.

- Propriety: The evaluation is aimed at insuring that the rights of persons affected by the evaluation will be protected.
- Feasibility: The evaluation is aimed at conducting unobtrusive investigations in natural settings (schools, workshops, local education agencies, and the state education agency).

EVALUATION OF PROJECT STAR

Project STAR is the first Program Assessment Branch evaluation activity to which the Standards for Evaluations have been applied. In line with this consideration, evaluation is viewed as the systematic investigation of the worth or merit of Project STAR. As a process, the evaluation of Project STAR is viewed as a method of obtaining and using information to form judgements which in turn supply recommendations that can be used in educational decision making.

The mission of the Project STAR evaluation is to provide the means for determining whether Project STAR met its goals: that is, whether the measured outcomes for a given set of Project STAR inputs match its intended or prespecified outcomes. In order to complete this mission of determining how "on-target" Project STAR was by comparing achieved outcomes with intended ones, an evaluation process was developed to provide a clear description of the components and their interrelation.

PROJECT STAR EVALUATION DESIGN

Over the past decade, in an attempt to provide a structure or framework to evaluate activities, there has been an increasing proliferation of evaluation models or systems. Stufflebeam and Webster (1978) in their address to the American Educational Research Association's Annual Convention (Toronto, Canada) described 13 types of models often used to evaluate education programs in a more systematic manner. The term models, as typically used in educational evaluation, are simply designs of exemplary processes or operating procedures and are probably best viewed

as alternative, descriptive conceptualizations of the development and evaluation processes. It should be noted, however, that these models can be somewhat misleading in that no specific one is available which provides the best solution to all program and evaluation questions.

The Maryland State Department of Education, Division of Instruction, Program Assessment Branch, does not espouse any single evaluation model as may have been proposed in the literature. Rather, evaluation must be tailored to meet the specifics of the program/project.

In order to design the evaluation to meet the programmatic dimensions of Project STAR, a system model approach, Instructional Program of Partition, Evaluation and Report Model (IPPER) was developed and implemented. Figure 1 illustrates this four stage systems model that includes Stage I: Project STAR Informational Needs Context; Stage II: Project STAR Structured Partition Process; State III: Project STAR Evaluation Scope and Sequence; and Stage IV: Data Integration and Reporting. The system is presented to provide the programmatic and evaluation structure as an orderly whole, clearly showing the interrelation of the parts to each other and to the whole itself.

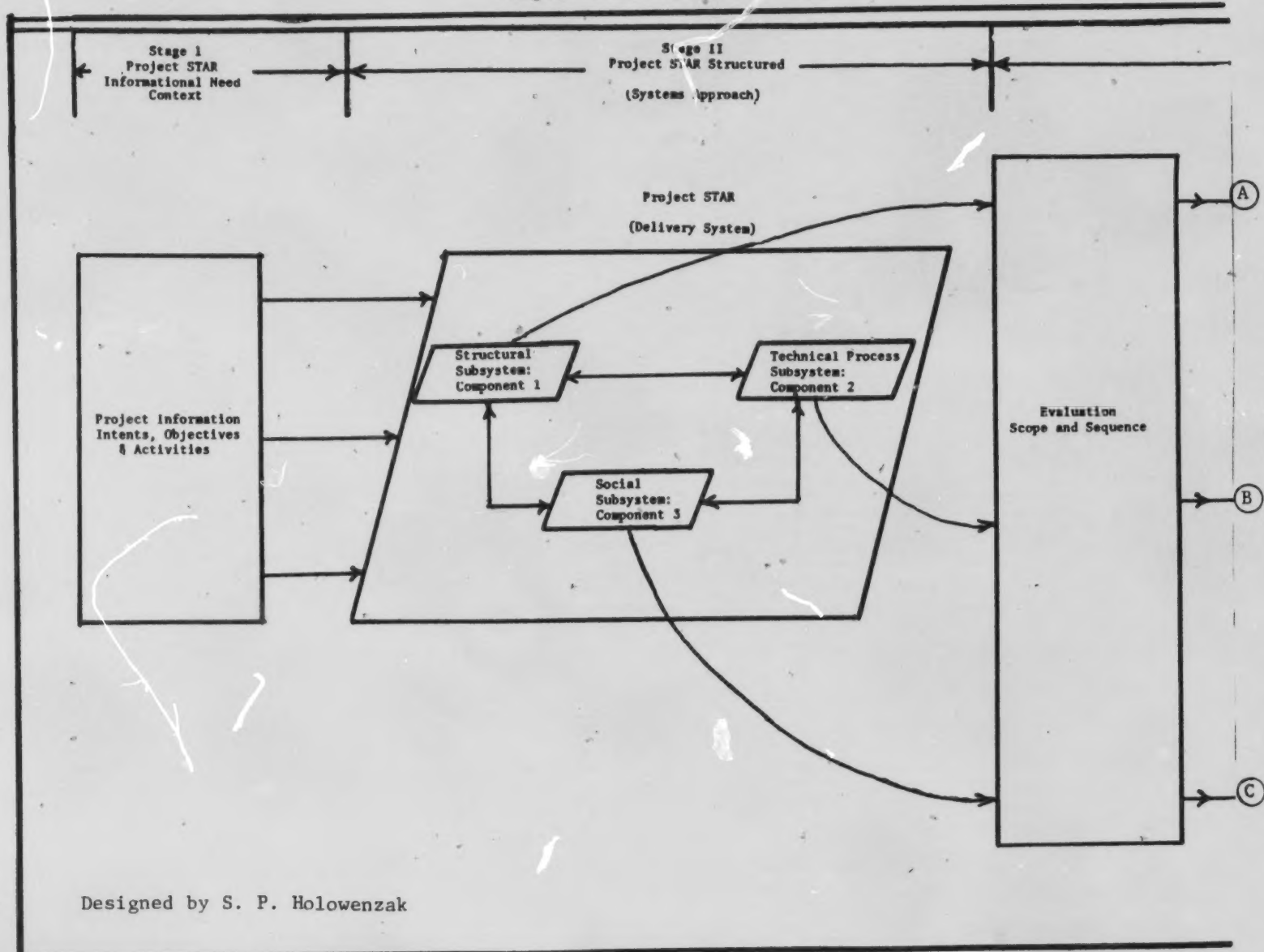
Stage I--Project STAR Informational Needs

The first stage involved (1) interviewing Project STAR information sources, such as, the Project director, planners, designers, developers, teachers; (2) obtaining access to data; and (3) scrutinizing the interview and data information collected (i.e., Project STAR Handbook, Standards for Successful Reading Programs, School Case Histories, Project STAR Documentation Forms). This stage enables the evaluators to determine the context of the Project. From these sources Project STAR evaluation profile (Appendix B) is developed.

Stage II--Project STAR Evaluation Structured Partition Process

The second stage partitioned the Project STAR delivery system into critical subsystems, namely: Component 1 - Structural Subsystem; Component 2 - Technical Process Subsystem; and Component 3 - Social Subsystem. (These subsystems are described in Project STAR Handbook,

FIGURE 1
Project STAR Evaluation Model



Designed by S. P. Holowenzak

FIGURE 1 (continued)
Project STAR Evaluation Model

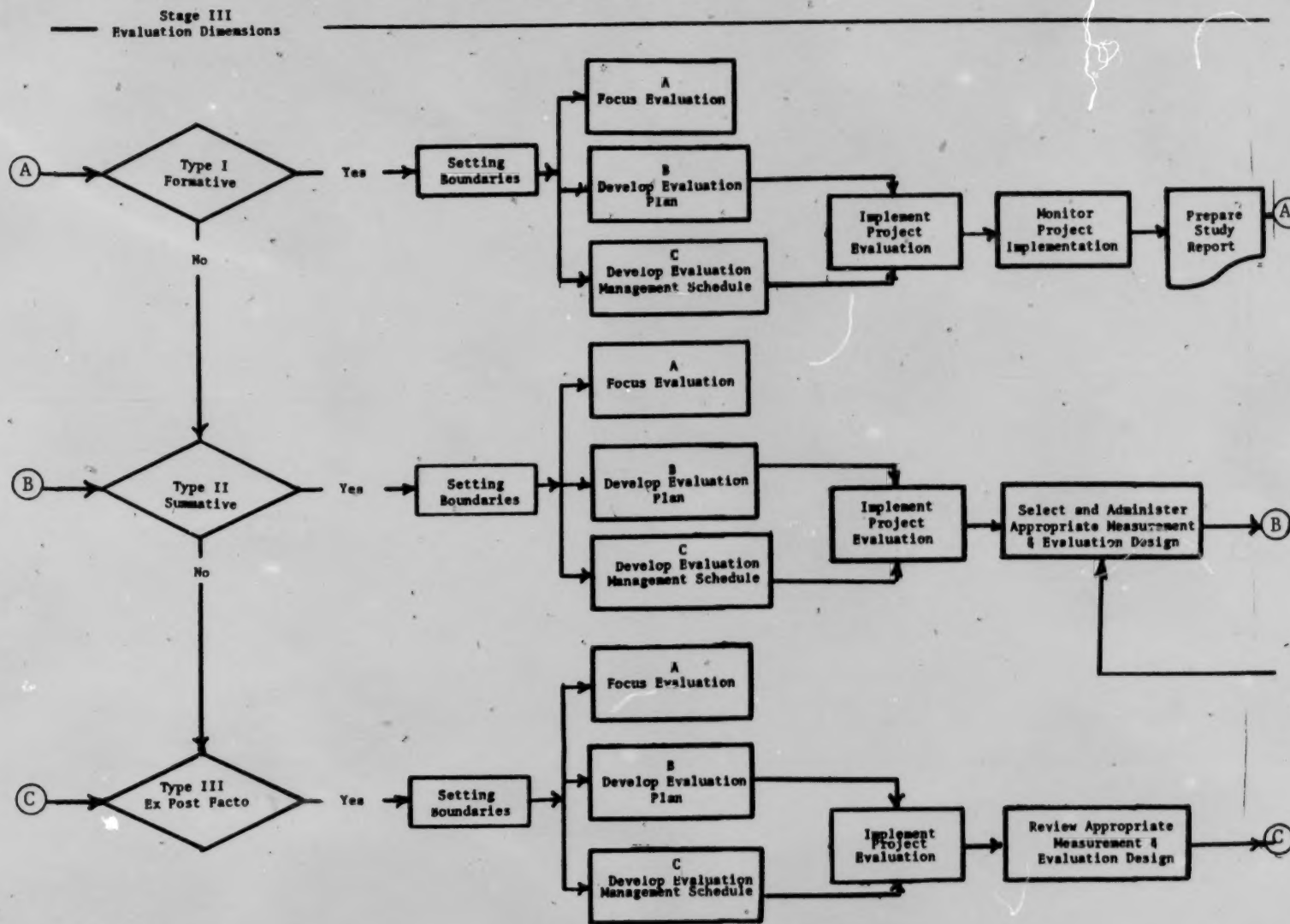
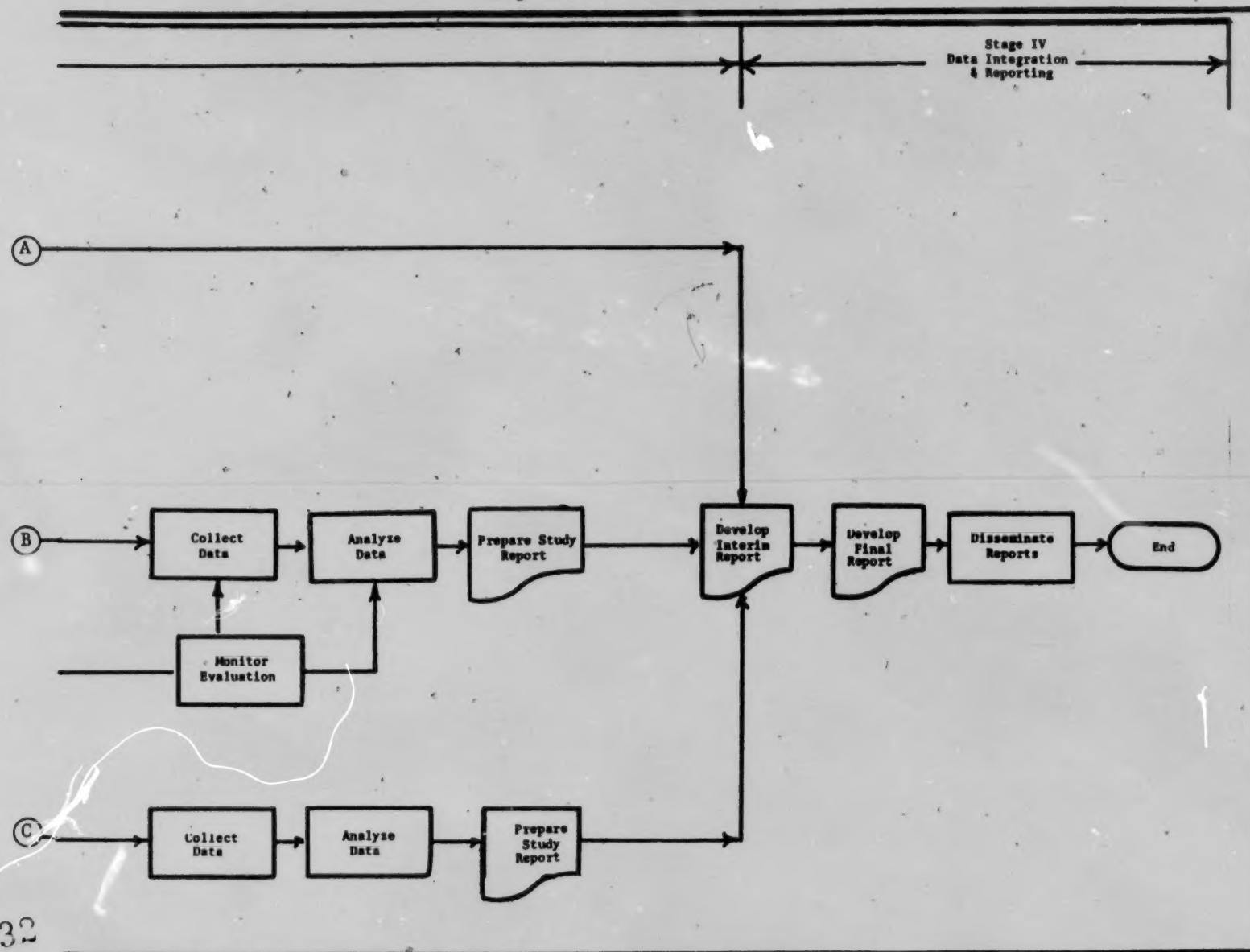


FIGURE 1 (continued)
Project STAR Evaluation Model



Volumes I and III.)

Structured partitioning is a technique that contains four distinct characteristics. First, structured project partitioning graphically shows the major subsystems of a project. Second, it charts the flow of activities of the program revealing the nature and sequence of experiences to which subjects/participants were exposed. Third, structured partitioning forces the integration of project parts by simultaneously detailing the goals, the objectives, and the activities to be provided and the behavioral outcomes to be expected. Finally, this process fosters the maintenance of a common conception of the program by providing planners, designers, and evaluators the opportunity to work in team-like fashion on the modeling task.

The assumption underlying the structured partitioning of a program/project is that until one can understand the systematic interrelationship of the components involved, project evaluations cannot be planned and implemented in an effective manner. A "component's" view of an educational project assumes that behavior is generated or changed by specific, discrete instructional activities and that the interrelationship among these activities builds to more general behaviors at project completion. The function of evaluation is to assess the instructional goals, objectives, and activities that comprise the global project in a manner that makes possible the rendering of a judgement as to whether the goals, objectives, and activities should be revised, deleted, modified, left unchanged, or supplemented with additional instructional components.

The role of project evaluation then is not only to partition the project and, hence, understand the nature of its parts, but also to collect evaluative data from which to judge the adequacy of each component. Should a project component fail to engender the intended outcome or relate with other project components to produce more comprehensive project outcomes, the effectiveness of a project component can be questioned.

Stage III--Evaluation Scope and Sequence

The third stage of the model involves the delineation of an

evaluation scope, sequence and design for each major component/subsystem of Project STAR. Three types of evaluations are described. In Type I--Formative Evaluation--information results are fed back into the project in order to improve its operations. For Type II--Summative Evaluation--measured results are matched to project goal and objective statements in order to determine the effectiveness of a component/subsystem. With Type III--Ex Post Facto Evaluation--an attempt is made to reconstruct the past by examining past outcomes in order to determine whether programs/projects are producing desired results.

The match between a particular component/subsystem and a particular type of evaluation is based upon a set of questions:

1. Does the project subcomponent require discussions and information about general knowledge and comprehension (achievement) outcomes?
2. Does the project subcomponent require discussions and information about specific knowledge and comprehension (achievement) outcomes?
3. Does the project subcomponent require attitudinal and/or value-oriented discussions and information?
4. Does the project subcomponent require learning related or performance related discussions and information?

Once these questions have been addressed, the performance agreement between program/project subsystem/components and the type of evaluation can be designed and implemented.

Figure 2 presents an overview of the Project STAR subsystem/goal, evaluation scope, and evaluation design relation. As can be seen, for a given Project STAR goal both an evaluation scope and sequence (i.e., formative, summative, or ex post facto) and a specified evaluation design (i.e., longitudinal, cross sectional, or longitudinal-cross sectional) has been determined.

Once a particular type(s) of evaluation design was determined, a specific sequence of procedures was followed. Figure 3 delineates a particular type of evaluation in terms of procedures that can include (1) setting boundaries for the evaluation, (2) developing an evaluation

FIGURE 2
Relation of Project STAR Goals to the Evaluation Scope and Design

Project STAR Goals	Evaluation Scope	Evaluation Design						
1. To improve performance, organization and administration of elementary school reading program		Time Series Design: Longitudinal - Trend Analysis for 3 and 5 Grade Students in Initial Eight Schools ----- Pre-Project STAR Onset and Maintenance of Project STAR						
A. Student reading achievement (cognitive domain)	Ex Post Facto and Summative Evaluation	<table><tr><td>1973-1974</td><td>1974-1975</td><td>1975-1976</td><td>1976-1977</td><td>1977-1978</td><td>1978-1979</td></tr></table>	1973-1974	1974-1975	1975-1976	1976-1977	1977-1978	1978-1979
1973-1974	1974-1975	1975-1976	1976-1977	1977-1978	1978-1979			
B. Standards (critical) for reading achievement program clusters	Formative and Summative Evaluation	One Group Pre-Test Post-Test Design: <table><tr><td>1977-78</td><td>1978-79</td></tr></table>	1977-78	1978-79				
1977-78	1978-79							
C. Teacher staff perceptions of standards and program clusters	Formative and Summative Evaluation	<table><tr><td>1977-78</td><td>1978-79</td></tr></table>	1977-78	1978-79				
1977-78	1978-79							
4. To develop needed competencies in improving reading program in content and process								
A. Inservice training	Formative and Summative Evaluation	Cross Sectional Design One Shot Case Study of Workshops 1 2 3 n <table><tr><td>1978-79</td><td>X O</td><td>X O</td><td>X O</td><td></td><td>3 X O</td></tr></table> X = Treatment O = Observation/Pre or Post Test	1978-79	X O	X O	X O		3 X O
1978-79	X O	X O	X O		3 X O			

FIGURE 3

FORMATIVE, SUMMATIVE, AND EX POST FACTO EVALUATION SCOPE AND SEQUENCE

FORMATIVE	SCOPE AND SEQUENCE SUMMATIVE EVALUATION	EX POST FACTO
I. Setting the Boundaries of the Evaluation A. Focus the evaluation: determine purpose of evaluation B. Develop evaluation plan C. Develop evaluation management schedule II. Implement Evaluation III. Monitor Program Implementation A. Ask questions B. Determine what course of action will result from the data C. Design an implementation monitoring system D. Design a progress monitoring system E. Construct instrument F. Set performance standards for interpreting the instrument G. Administer instrument H. Analyze data with an eye toward program improvement IV. Prepare Study Report A. Decide what was to be said B. Present information C. Describe the evaluation D. Prepare the report	I. Setting the Boundaries of the Evaluation A. Focus the evaluation . Determine the purpose of the evaluation B. Develop evaluation plan C. Develop evaluation management schedule II. Implement Evaluation III. Select Appropriate Measurements and Evaluation Designs A. Decide what was to be the measure B. Choose measurement instruments C. Select final instruments D. Plan the construction and purchase E. Plan the data analysis that will perform with results from each instrument F. Choose evaluation designs IV. Collect Data A. Set deadlines B. Set up evaluation design C. Administer, instrument, score them and record data V. Analyze Data A. Graph the data B. Do the analysis VI. Prepare Study Report A. Plan the report B. Choose method of presentation C. Assemble report	I. Setting the Boundaries of the Evaluation A. Focus the evaluation . Determine the purpose of the evaluation B. Develop evaluation plan C. Develop evaluation management schedule II. Implement Evaluation III. Target in on Appropriate Measurements and Evaluation Design You Will Consider A. Decide what measures were used B. Specify instruments you will review C. Plan the retrieval of information about subject you consider D. Plan the data analysis that will be performed with results for each instrument considered E. Choose the evaluation design IV. Collect Data A. Set deadlines B. Set up evaluation design C. Retrieve data, score data, and record data V. Analyze Data A. Graph the data B. Do the analysis VI. Prepare Study Report A. Plan the report B. Choose method of presentation C. Assemble report

plan (Appendix C) and a management plan (Appendix D), (3) implementing the evaluation monitoring activities when appropriate, (4) collecting and analyzing data, and (5) reporting.

Stage IV--Data Analysis Integration and Reporting

The final stage in the evaluation model is referred to as the data integration and reporting. This stage utilizes the information collected, analyzed, and interpreted from Stage I--Project STAR Information Needs Context; Stage II--Project STAR Structured Partition; and Stage III--Evaluation Scope and Sequences in order to develop and disseminate a Project STAR Interim Evaluation Report (see Program Assessment Research and Evaluation Services (PARE) Dec. 79-1) and Project STAR Final Evaluation Report.

By way of analogy, Stages I and II can be viewed as a diagnostic set of activities conducted by evaluators to understand the context of Project STAR. Stage III may be regarded as prescriptive in nature. Here the evaluator will prescribe a particular type of evaluation strategy (formative, summative, or ex post facto) based on the particular parameter of a given project subsystem/component. Stage IV allows the evaluator to analyze, synthesize, and summarize the vast body of data gleaned from Stages I, II, and III, then provide state education decision makers with information necessary to make judgements about a project.

DISCUSSION

An Instructional Program Partition, Evaluation, and Report Model (IPPER) has been presented, and it becomes important to highlight salient specifications that have been provided in the prior stages. The twofold purpose of this generalized framework for evaluation was (1) to provide Maryland State Department of Education decision makers with an evaluation structure that can attack the multiple and varied problems involved in measuring the effects of instructional programs, projects, and materials; and (2) to describe and apply the structure to Project STAR to enable decision makers to make some judgement about this

educational reading program intervention.

The system described is referred to as the IPPER Model. This acronym is derived from the four stage evaluation model discussed. In Stage I, the evaluator seeks to determine the context in which the program is operating, including such things as informational background to the programs, resources available, and the organizational framework involved. Stage II enables the project designers and evaluators to collaborate in order to partition the program/project into its subsystems, components, goals, objectives, operational procedures, and professional responsibilities. Stage III allows the evaluator to relate means (Stages I and II) to ends by designing an evaluation system that will measure the goal, objective, and activity triad to actual outcomes of a subsystem. Stage IV allows the evaluator to integrate programmatic concerns, evaluation scope and procedures, and data into a consistent reporting format. These four stages have been presented because they cover the essential generalized areas to be considered when an evaluation is being planned and implemented after a project has been operational for some time.

The value and effectiveness of the IPPER Model can be determined only after it has been applied to various contexts, problems, and situations. Project STAR is the first attempt to apply such an evaluation model to a programmatic framework. The information found in this report resulting from the application of this model to Project STAR is a step forward in relating theory to practice and applying systematic inquiry to the practical problems of better decision making in educational situations.

PART TWO

A--THE READING ACHIEVEMENT STUDY

GOAL STATEMENT

The goal of the first Project STAR study was to determine if the reading comprehension achievement of students in first and second year participating schools improved over time. Emphasis is placed on students' cognitive abilities.

METHODS

Subjects

Third and fifth grade students from the eight first year and the 26 second year Project STAR elementary schools in five Maryland local education systems were the subjects of this study.

Instrumentation and Procedures

Each spring since 1973, as a part of the statewide Maryland Accountability Program (MAP), 3, 5, 7, and 9 grade students were administered the Vocabulary, Reading Comprehension, Spelling, Capitalization, and Punctuation subtests of the Iowa Tests of Basic Skills (1971 Edition, Form 5). (The Iowa Tests of Basic Skills is a standardized-norm-referenced test in contrast to other types of tests such as criterion referenced or objective referenced test, such as, the Maryland Functional Mathematics Test and the Maryland Functional Reading Test.) For this particular study, only the students' Iowa Tests of Basic Skills reading comprehension subtest scores were used. The evaluation design used in this study was longitudinal time series covering the period from school years 1973-74 to 1978-79.

Measurement of Goal I

Reading Comprehension Grade Equivalent scores (G.E.)--Unit of Analysis--from the Iowa Tests of Basic Skills (ITBS) for the third and fifth grade students of the first and second year school participating

in Project STAR were used to measure and analyze changes in student achievement in reading.

RESULTS

In this study the Grade Equivalent score results for Project STAR on Reading Comprehension are presented four different ways. As a starting point, reading achievement trends are plotted for the third and fifth grade pupils for the eight first year schools over a three-year period (1975-76 = pre-Project STAR; 1976-77 = first year of Project STAR; and 1977-78 = second year of Project STAR). Next, the trend analysis of results are expanded. Here, Grade Equivalent scores are reviewed for a three school year period prior to the onset of Project STAR intervention (school years 1973-74 to 1975-76) and for the three school year period that Project STAR was operational and maintained (school years 1976-77 to 1978-79). The third trend analysis provides Grade Equivalent results when the groups' third grade students are compared with themselves in the fifth grade. The final trend analysis of Grade Equivalent results is concerned with second year entry schools (N = 26) for third and fifth grade students (school years 1976-77 and 1977-78).

Three Year Longitudinal Analysis

In Figures 4 and 5 reading achievement trends are plotted for third and fifth grade pupils for the eight first year schools over a three-year period (1975-76 = pre-Project STAR, 1976-77 = first year of Project STAR; and 1977-78 = second year of Project STAR).

The Grade Equivalent results for Maryland in Figure 4 show that the average reading comprehension Grade Equivalent score for third grade students progressed steadily upward over the three-year period (school year 1975-76, G.E. = 3.7; school year 1976-77, G.E. = 3.8; school year 1977-78, G.E. = 3.9).

For the pre-Project STAR school year 1975-76, the pattern for schools' third grade average reading comprehension General Equivalent scores were below or at (G.E. Range = 2.7 to 3.7) the state average (G.E. = 3.7). In school year 1976-77, reading achievement scores for the

FIGURE 4

Reading Comprehension Grade Equivalent (G.E.) Scores in Project STAR First Year Participating Schools
School Years 1975-1979 (Grade 3)

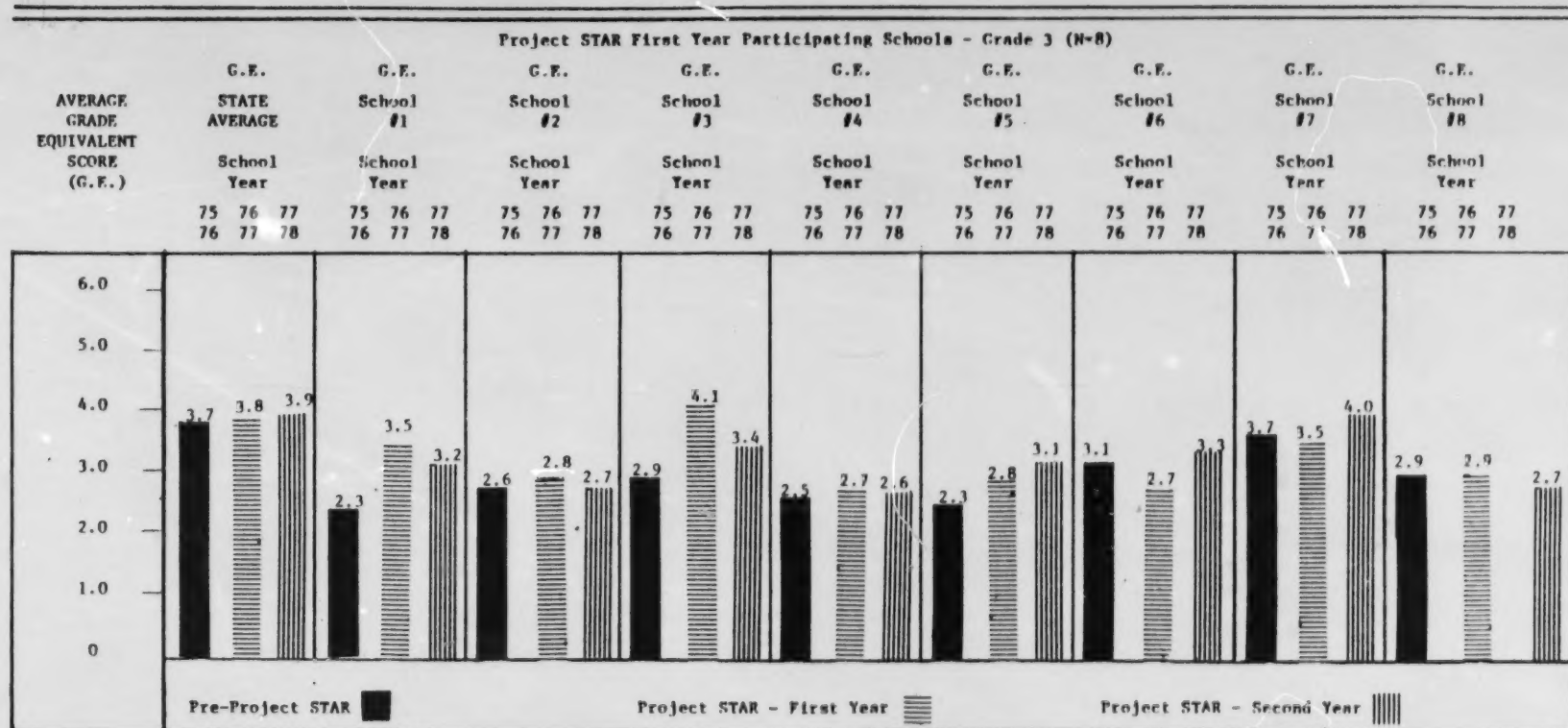
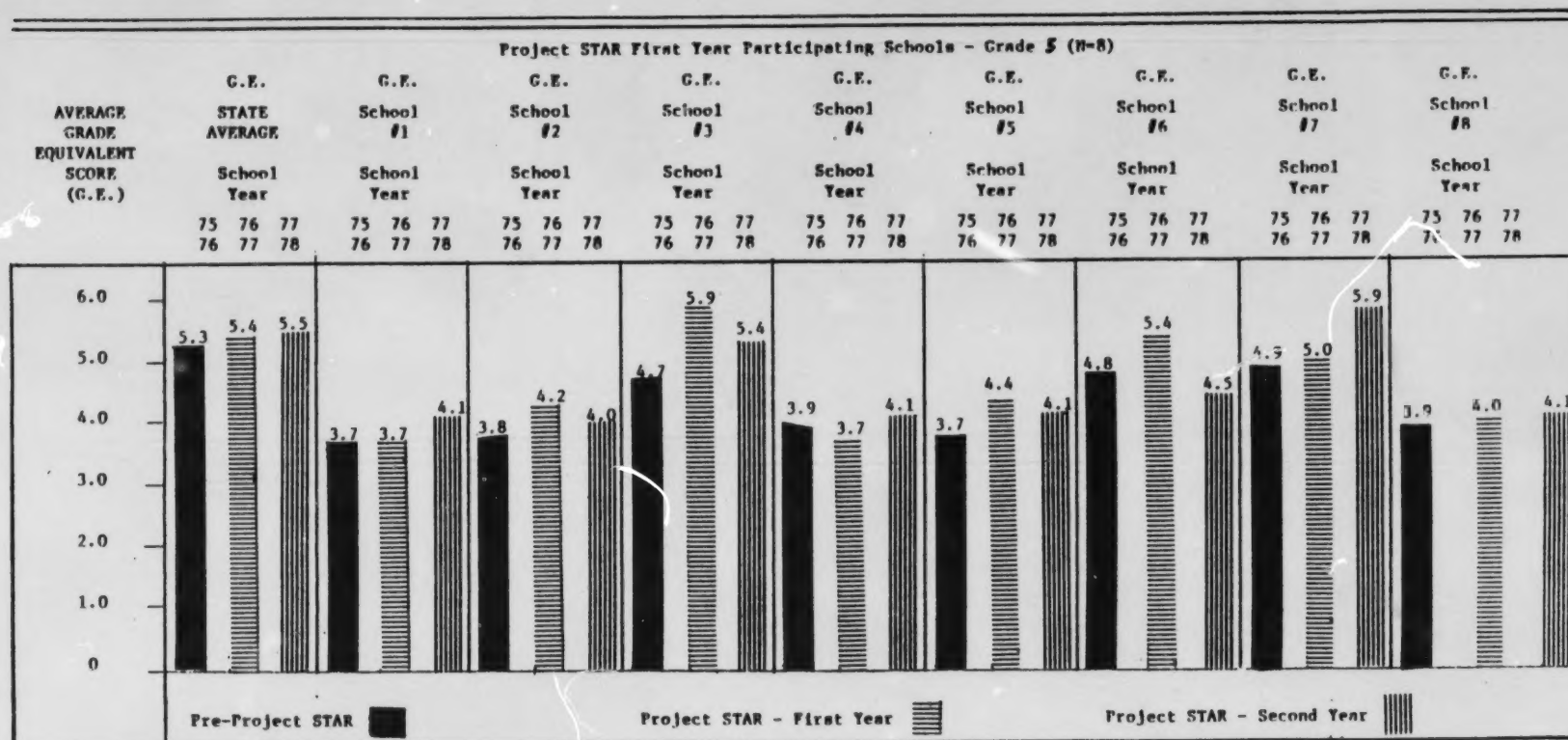


FIGURE 5
Reading Comprehension Grade Equivalent (G.E.) Scores in Project STAR First Year Participating Schools
School Years 1975-1979 (Grade 5)



first year schools participating in Project STAR tended, in a few instances, to approach more closely (6 of 8 schools) or surpass (1 of 8 schools) the state average (G.E. = 3.8). For school year 1977-78, one of eight schools slightly exceeded (G.E. = 4.0), the state average (G.E. = 3.9). Two of the remaining seven schools showed some upward mobility toward the state mean while five schools showed slightly downward tendencies. In brief, during the pre-Project STAR period, schools tended to be somewhat below the state General Equivalent average while during the first and second year of Project STAR, third grade General Equivalent scores hovered closer to or, in a few cases, exceeded the state mean.

In Figure 5, the results indicate that average reading comprehension Grade Equivalent scores for fifth grade students also progressed steadily upward over the three-year period (school year 1975-76, G.E. = 5.3; school year 1976-77, G.E. = 5.4; school year 1977-78, G.E. = 5.5).

For the pre-Project STAR school year 1975-76 shown in Figure 5, the pattern for schools' fifth grade reading comprehension score Grade Equivalent range was below (G.E. = 3.7 to G.E. = 4.9) the state average (G.E. = 5.3). In school year 1976-77, one school exceeded (G.E. = 5.9), one school reached (G.E. = 5.4), and six schools were below (G.E. range = 4.0 to 5.0) the state average reading comprehension score (G.E. = 5.4). The school year 1977-78 reading comprehension score range went from a G.E. = 4.0 to G.E. = 5.9. Here, one school exceeded (G.E. = 5.9) and seven schools were somewhat below (G.E. range = 4.0 to 5.4) the state mean (G.E. = 5.5).

Since the data suggest some positive effects were happening to the third and fifth grade General Equivalent scores, a decision was made to expand the analysis to include General Equivalent data from school years 1973-74 to 1978-79. Such an expansion would provide greater precision to this studies analysis and interpretations.

Six Year Longitudinal Analysis

The next stage in the trend analysis of results was to expand the initial analysis of the initial eight Project STAR first year elementary schools. Tables 2 and 3 show respectively third and fifth Grade Equivalent

TABLE 2

Trend Analysis - School Years 1974-74 to 1978-79 - Third Grade - Grade Equivalent Scores

School Year and Grade Equivalent Score							
	1973 1974 G.E.	1974 1975 G.E.	1975 1976 G.E.	Onset of Project STAR	1976 1977 G.E.	1977 1978 G.E.	1978 1979 G.E.
State Average	3.6	3.6	3.7		3.8	3.9	NA*
School Average							
1	2.2 (709.0) **	2.3 (678.0)	2.4 (633.0)		3.5 (594.0)	3.2 (604.0)	3.0 (592.0)
2	2.4 (501.0)	2.9 (433.0)	2.6 (439.0)		2.8 (493.7)	2.7 (465.0)	2.8 (466.0)
3	3.1 (778.0)	2.9 (591.0)	2.9 (524.0)		4.1 (488.0)	3.4 (469.0)	3.6 (445.0)
4	2.4 (798.0)	2.2 (734.0)	2.5 (724.0)		2.7 (551.0)	2.6 (547.0)	2.6 (499.0)
5	2.4 (842.0)	2.3 (789.0)	2.3 (741.0)		2.8 (605.0)	3.1 (535.0)	2.9 (524.0)
6	2.7 (211.0)	3.5 (198.0)	3.1 (204.0)		2.7 (171.0)	3.3 (133.0)	3.2 (132.0)
7	3.0 (699.0)	2.9 (688.0)	3.7 (657.0)		3.5 (606.0)	4.0 (372.0)	3.5 (384.0)
8	2.6 (349.0)	2.6 (343.0)	2.9 (348.0)		2.9 (294.0)	2.7 (286.0)	3.3 (267.0)
Total Average Mean-G.E. (N=8)	2.6	2.6	2.8		3.2	3.1	3.1
Difference Between State G.E. Average and Total Average G.E. for Schools (N=8)	1.0	.90	.90		.623	.67	NA *

* Not Available ** Full Time Equivalent Enrollment for a School Year

TABLE 3

Trend Analysis - School Years 1973-74 to 1978-79 - Fifth Grade - Grade Equivalent Scores

	School Year and Grade Equivalent Score						
	1973 1974 G.E.	1974 1975 G.E.	1975 1976 G.E.	Onset of Project STAR	1976 1977 G.E.	1977 1978 G.E.	1978 1979 G.E.
State Average	5.3	5.3	5.3		5.4	5.5	NA*
School Average							
1	3.8 (709.0) **	3.8 (678.0)	3.7 (633.0)		3.7 (594.0)	4.1 (604.0)	4.1 (592.0)
2	3.5 (501.0)	3.7 (433.0)	3.8 (439.0)		4.2 (493.0)	4.0 (465.0)	4.0 (466.0)
3	4.4 (778.0)	4.7 (591.0)	4.7 (524.0)		5.9 (488.0)	5.4 (469.0)	4.8 (445.0)
4	3.9 (798.0)	3.8 (734.0)	4.0 (724.0)		3.7 (551.0)	4.1 (547.0)	4.3 (490.0)
5	3.8 (842.0)	3.7 (789.0)	3.7 (741.0)		4.4 (605.0)	4.1 (535.0)	4.3 (524.0)
6	4.6 (211.0)	4.8 (198.0)	4.9 (204.0)		5.4 (171.0)	4.5 (133.0)	4.1 (132.0)
7	4.8 (699.0)	4.5 (688.0)	4.9 (657.0)		5.0 (606.0)	5.9 (372.0)	5.3 (384.0)
8	4.4 (349.0)	4.2 (342.0)	3.9 (348.0)		4.0 (294.0)	4.1 (286.0)	4.5 (267.0)
Total Average Menn-G.E. (N=8)	4.1	4.1	4.1		4.5	4.5	4.4
Differences between State G.E. Average and Total Average G.E. for Schools (N=8)	1.1	1.1	1.1		.9346	1.023	NA**

* Not Available

** Full Time Equivalent Enrollment for a School Year

scores by school year results. The objective of this analysis was to determine a profile of Grade Equivalent scores three years prior to the introduction of Project STAR as a reading program intervention and Grade Equivalent scores from the onset of Project STAR to its end.

Table 2 presents results according to the state average, individual school average, total school average, and the difference between state and school averages for third grade students' grade equivalent scores attained from school years 1973-74 to 1978-79 respectively. The results suggest that a small but noticeable change in Grade Equivalent scores took place. The difference between state and school averages prior to Project STAR (school years 1973-74, 1974-75, and 1975-76) are somewhat higher than those attained from the onset of the Project STAR intervention (school years 1976-77, 1977-78, and 1978-79). During the latter school years there was a tendency for the average school to move closer to the state school mean.

Table 3 illustrates results for fifth grade students over the same six school year period. In a similar manner, fifth grade results show the pattern of average school Grade Equivalent scores as being somewhat further away from the state average for school years 1973-74 to 1975-76 (G.E. = 11) while becoming somewhat closer to the state average from the onset of Project STAR school years 1976-77 to 1978-79 (G.E. = .93, 1.0, and N.A. respectively).

Same School/Student Comparison

The third analysis of results in this study is a comparison of the Grade Equivalent scores for third grade students and following these same students two years later when they were in fifth grade. Here students are compared with themselves in another grade.

Table 4 provides information on the eight participating schools for school years 1975-1976 and 1977-1978. Grade Equivalent differences between the state Grade Equivalent average and school Grade Equivalent average are shown for both school years. Students' Grade Equivalent scores when compared for these two points in time remained essentially stable.

Table 4
Third to Fifth Grades - Same Group of Students Comparison on Grade Equivalent Scores
in School Year 1975-76 (Pre Project STAR) and 1977-78

Third Grade G.E. Scores 1975-76				Fifth Grade G.E. Scores 1977-78		
School	Average State G.E.	Average School G.E.	Difference	Average State G.E.	Average School G.E.	Difference
1	3.7	2.4	1.4	5.5	4.1	1.4
2	3.7	2.6	1.1	5.5	4.0	1.5
3	3.7	2.9	0.8	5.5	5.4	0.1
4	3.7	2.5	1.2	5.5	4.1	1.4
5	3.7	2.3	1.4	5.5	4.1	1.4
6	3.7	3.1	0.6	5.5	4.5	1.0
7	3.7	3.7	0.0	5.5	5.9	0.4
8	3.7	2.9	0.8	5.5	4.1	1.4
TOTAL (N=8)	3.7	2.8	0.90	5.5	4.5	0.98

Second Year School Results

The next portion of this study concerned a trend analysis of reading comprehension Grade Equivalent scores in Project STAR second year schools for grades three and five. These scores were computed from student level data on the Iowa Tests of Basic Skills. This analysis examined the data in a manner which permitted schools to be compared on both a grade by grade basis and for combined grades for the two-year period. Information is also compared to the "average" Maryland student.

Figure 6 presents information pertaining to the 26 second year schools which participated in Project STAR. For each grade level in a school, the average Grade Equivalent scores are shown along with the trends period that occurred for school years 1976-77 to 1977-78. Trends are classified as Upward - (U); Stable - (S); Downward - (D); and No Data Available (ND).

Of the 51 (100%) grades in 26 schools considered (third and fifth grade combined), 33 (65%) grades show an upward trend in the reading comprehension grade equivalent scores. Four grades (8%) remained stable over this two-year period while in 14 grades (27%) a slight downward trend occurred. For one fifth grade no data was available since it was a K-3 school.

A review of the third grade information in this table shows some growth in 18 (69%) of the 26 (100%) grades considered. One third grade (4%) had a Grade Equivalent score that remained stable while seven (27%) of the third grade scores considered showed some decline in reading comprehension.

For the 25 (100%) fifth grades considered, 15 (60%) experienced an upward trend in their Grade Equivalent scores. Three of the fifth grades (12%) remained the same while in seven of the fifth grades (28%) some decline is shown. In one fifth grade no Grade Equivalent data was available for the fifth grade.

DISCUSSION

The preceding data suggests the following questions related to

FIGURE 6
Reading Comprehension Grade Equivalent Scores (G.E.) Trend Analysis For Second Year STAR School
Grades 3 and 5 - School Years 1976-77 to 1977-78

State Level - Assessment Information				School Year 1976-77 1977-78	Grade 3 3	Average GE 3.8 3.9	TREND: Upward (U) 0 **	Remained the Same (S) NA	Downward (D) NA	No Data NA
				1976-77 1977-78	5 5	5.4 5.5	X **	NA	NA	NA

School No. School Year (1976-77) (1977-78)	Grade	Average (GE)	Trend*				School No. & School Year (1976-77) (1977-78)	Grade	Average (GE)	Trend *				School No. & School Year (1976-77) (1977-78)	Grade	Average (GE)	Trend *			
			U	S	D	ND				U	S	D	ND				U	S	D	ND
01 76-77	3	3.4					10 76-77	3	3.2					19 76-77	3	3.4				
77-78	3	3.5					77-78	3	3.1					77-78	3	3.8				
76-77	5	4.8					76-77	5	N.A.					76-77	5	4.8				
77-78	5	5.1	X				77-78	5	N.A.				X	77-78	5	4.8		X		
02 76-77	3	3.3					11 76-77	3	2.5					20 76-77	3	3.1				
77-78	3	3.4					77-78	3	2.7					77-78	3	2.8				
76-77	5	4.6					76-77	5	3.7					76-77	5	4.5				
77-78	5	4.8	X				77-78	5	3.8	X				77-78	5	4.2			X	
03 76-77	3	2.8					12 76-77	3	2.5					21 76-77	3	3.5				
77-78	3	3.0					77-78	3	2.8					77-78	3	3.1				
76-77	5	4.5					76-77	5	4.1					76-77	5	4.5				
77-78	5	4.9	X				77-78	5	3.9			X		77-78	5	4.6	X			
04 76-77	3	2.9					13 76-77	3	2.7					22 76-77	3	3.7				
77-78	3	3.1					77-78	3	2.8					77-78	3	3.8				
76-77	5	4.7					76-77	5	2.8					76-77	5	5.3				
77-78	5	5.0	X				77-78	5	4.8	X				77-78	5	5.9	X			
05 76-77	3	3.1					14 76-77	3	2.9					23 76-77	3	3.6				
77-78	3	3.2					77-78	3	3.0					77-78	3	3.7				
76-77	5	4.1					76-77	5	4.4					76-77	5	4.9				
77-78	5	4.8	X				77-78	5	4.7	X				77-78	5	5.6	X			
06 76-77	3	3.3					15 76-77	3	2.7					24 76-77	3	4.0				
77-78	3	3.0			0		77-78	3	4.3					77-78	3	3.8				
76-77	5	4.5					76-77	5	4.1					76-77	5	5.5				
77-78	5	4.1			X		77-78	5	4.5	X				77-78	5	5.4			X	
07 76-77	3	2.7					16 76-77	3	3.4					25 76-77	3	3.6				
77-78	3	2.9					77-78	3	3.1					77-78	3	3.6				
76-77	5	3.9					76-77	5	4.7					76-77	5	5.2				
77-78	5	3.8			X		77-78	5	4.7		X			77-78	5	5.3	X			
08 76-77	3	2.5					17 76-77	3	2.9					26 76-77	3	3.0				
77-78	3	2.6					77-78	3	2.6					77-78	3	3.4				
76-77	5	4.0					76-77	5	4.0					76-77	5	4.6				
77-78	5	4.0			X		77-78	5	4.2	X				77-78	5	4.5			X	
09 76-77	3	3.3					18 76-77	3	3.0											
77-78	3	3.5					77-78	3	3.3											
76-77	5	5.0					76-77	5	4.6											
77-78	5	4.5			X		77-78	5	5.0	X										
(A) Sub Total	3 5	(N = 7) (N = 9)	4 5	0 1	1 3	0 0	(B) Sub Total	3 5	(N = 9) (N = 9)	6 6	0 1	1 1	0 0	(C) Sub Total	3 5	(N = 8) (N = 7)	4 4	1 1	1 3	0 0
TOTAL GRADE 3										18	1	7	0							
TOTAL GRADE 5										15	3	7	1							
TOTAL - TOTAL										33	4	14	1							
COMBINED GRADES 3&5										(69%)	(4%)	(27%)	(0%)							
										(60%)	(12%)	(28%)	(0%)							
										(65%)	(8%)	(27%)	(0%)							

**U = Upward
S = Stable
D = Downward
ND = No Data

**0 = 3rd grade
X = 5th grade

*U = Upward
 S = Stable
 D = Downward
 ND = No Data

**0 - 3rd grade
 **X - 5th grade

reading achievement: (1) Did change occur? (2) How likely is it that the observed effect was a result of the intervention? (3) Was the effect consistent enough and observed often enough to have made an impact on the reading programs, participants, subjects, and/or materials used? (4) Was the effect educationally important?

First, based on data from the three- and six-year longitudinal time series designs presented for the eight initial Project STAR schools, some change (increase in Grade Equivalent scores toward the state average) was noticed in the reading comprehension Grade Equivalent scores of third and fifth grade students. Third grade scores were slightly higher than fifth grade scores. For the comparison between the third grade students with themselves in fifth grade (school years 1975-76 - 1977-78), little change was noticed in the Grade Equivalent scores. With the second year STAR schools, however, Grade Equivalent scores for the 51 grades considered were shown to have increased in 33 grades, remained stable in four grades and declined in 14 grades.

Second, it is difficult to tell precisely from the data whether the improvement in the Grade Equivalent scores was the direct result of the Project STAR reading program. The Project STAR intervention did influence the change to some degree. However, the question of how much influence must be left unanswered since the effect may also have been produced by some other interventions operating within the schools, perhaps Project Basic. The essential problem is that an effect can be composed in many different ways when there are multiple causes. Thus, it becomes difficult to determine the correspondence between an effect and other effects that might be a cause.

Third, the data suggests that growth in reading achievement vis a vis grade equivalent scores. The data seems consistent enough and observed often enough over time to have made some impact on the achievement of the third and fifth grade students examined in this study.

Fourth, the effect has educational importance in that the Grade Equivalent scores tended to rise slightly toward the state Grade Equivalent average for reading comprehension.

PART THREE

B--THE STANDARDS FOR SUCCESSFUL READING PROGRAMS STUDY

GOAL STATEMENT

The second study determined the status of participating Project STAR schools as they moved toward meeting the 28 established Standards for Successful Reading Programs and the four Standards designated as critical among the Standards, namely: Standard 4, *Identified Instructional Population Groups of Students*; Standard 16, *Appropriate Instruction of Population*; Standard 25, *Student Maryland Accountability Program Grade Equivalent Test Scores Advancement Toward Meeting Maryland State Norms*; and Standard 27, *Use of Test Results as a Basis for Changes in Instructions*.

METHODS

Participants

Thirty-six (36) public school staffs participating in Project STAR in school years 1977-78 and 1978-79 were the primary focus of the second study. The local school systems represented included Anne Arundel County, Baltimore City, Calvert County, Charles County, Howard County, Prince George's County and St. Mary's County. Table 5 presents a local education agency by school breakdown of the type of service being provided (full, maintenance, or minimal service) to participating schools by the Project STAR team on a school-year by school-year basis.

Procedures

The Documentation Process developed by the Project STAR Team to determine if a particular school met a particular Standard or set of Standards within the context of the Standards for Successful Reading Programs can be found in Figure 7. As can be seen from this illustration, each school has an established Reading Team and a Validation Team. The school Reading Team, under the leadership of the school-based STAR Resource Teacher, was responsible for the collection and analysis of data

TABLE 3

PROJECT STAR
School Status in Project
1976-1979

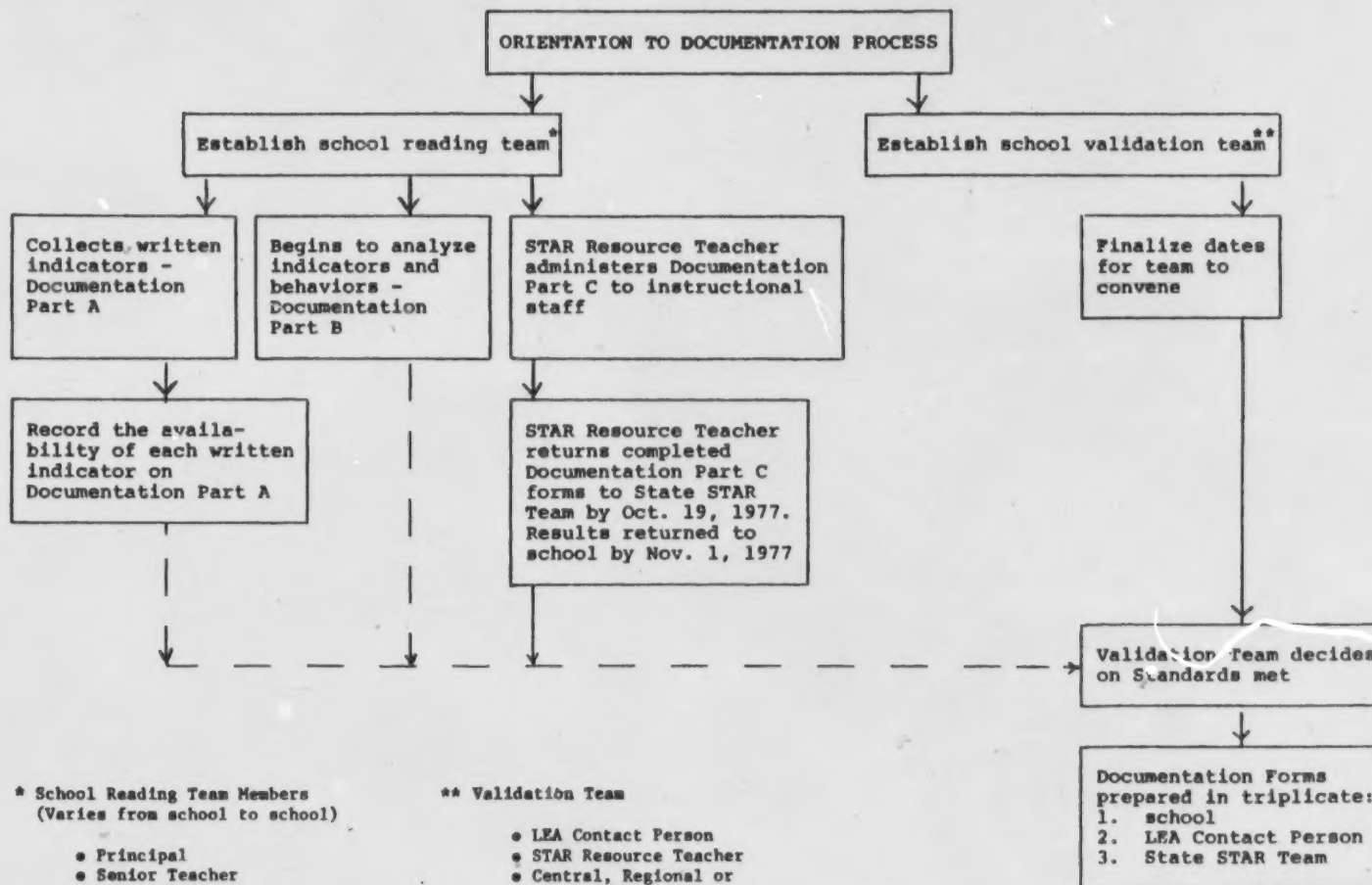
LOCAL UNITS (N = 7) SCHOOL (N = 40)	STATUS		
	76-77 YEAR 1	77-78 YEAR 2	78-79 YEAR 3
<u>ANN ARUNDEL</u>			
Ferndale		E	FS
North Glen		E	FS
Ridgeway		E	FS
Severn		E	FS
Shady Side	E	FS	M
Solley	E	FS	M
Van Bokkelen		E	M
<u>BALTIMORE CITY</u>			
Robert Coleman, #142		E	FS
Curtis Bay, #207	E	FS	M
Gilmore, #107		E	FS
Dr. Bernard Harris, #250		E	FS
Highlandtown, #237		E	FS
Thomas G. Hayes, #102	E	FS	M
Liberty, #64		E	FS
James Monroe, #48		E	FS
Montebello, #44		E	FS
Rutland, #149	E	FS	M
Tench Tilghman, #13	E	FS	FS
* Harriet Tubman, #138	E	FS	FS
George Washington, #22		E	FS
Waverly Elementary, #51		E	FS
Carter Godwin Woodson, #160		E	FS
<u>CALVERT</u>			
Appeal		E	FS
Central			E
<u>CHARLES</u>			
Gale-Bailey		E	FS
Glasva		E	FS
****Mount Hope		E	FS
****Nanjemoy		E	FS
Wayside	E	FS	FS
<u>HOWARD</u>			
Guilford	E	W	
<u>PRINCE GEORGE'S</u>			
Bradbury Heights		E	W
** Brentwood	E	CLOSED	
Colmar Manor		E	FS
Dodge Park		E	FS
*** Edmonston		E	FS
Green Valley		E	FS
Kentland		E	FS
Sandymount		E	FS
*** Silver Hill		E	FS
<u>ST. MARY'S</u>			
Frank Knox	E	W	
Schools Receiving Service	11 (E)	36 (FS + E)	36 (FS + E + M)

CODE: E = entered with full service; W = withdraw;
FS = full service continued; M = maintenance or minimal service

** School was closed by county, 1977
* Entered as Robert Fulton School, #138
**** School was closed by county, 1979
***** These schools were combined, 1979

FIGURE 7

Project STAR Documentation Process



* School Reading Team Members
(Varies from school to school)

- Principal
- Senior Teacher
- Grade Chairmen
- Team Leader
- Reading Specialist
- Speech and Language Specialist
- Resource Teacher

** Validation Team

- LEA Contact Person
- STAR Resource Teacher
- Central, Regional or Area Supervisor
- State STAR Team Member
- Principal
- Classroom Teacher(s)

on the status of each Standard as well as the administration and completion of teacher assessment instrument. The Validation Team had the overall responsibility to (1) decide which Standards were met, (2) provide input into the development of Action Plans based on the total program assessment, and (3) document and record Standards met.

When a school entered Project STAR, the State STAR Team visited the site (first year schools - fall 1978) to determine among other things the school entry level status on all of the Reading Standards (this activity acted as a pre-test/observation situation). A second visit was made in spring 1979 to determine the status on the Reading Standards upon the completion of Project STAR (this activity became the post-test/observation situation). This evaluation design is referred to as the One Group Pre-test, Post-test Design. In this design each school is compared to itself on all of the Standards and a determination is made as to what Standards were met or unmet.

Instrumentation

STAR Project Documentation Form (Appendix E) was used to determine if the Standards had been met. This form contains (1) a goal statement for each Cluster of Standards; (2) identified Standard(s) to be met by the school; (3) a set of indicators (to be verified by Project STAR Team members) to determine if the Standard(s) had been met; (4) the location in the school where each indicator could be found; and (5) a space for suggestions that were to be included in the school's Action Plan.

RESULTS

General

This study presents results of schools participating in Project STAR for all the Standards in general as well as for those Standards identified as "critical," namely, Standards 4, 16, 25, and 27.

Reading Standards

Table 6 summarizes information for each Reading Standard in terms of the number and percentage of schools as of May 30, 1979. The results presented indicate--(1) all 36 schools (100%) met six of the Reading

TABLE 6

Status of Reading Standards for all 36 Participating Schools
of Project STAR as of May 30, 1979

STANDARDS	NUMBER (N=36) OF SCHOOLS MEETING STANDARDS	%
1. - Point-of-View	36	100
2. - Goals & Objectives	33	92
3. - Dissemination	30	83
4. - Student Grouping	35	97
5. - Group Objectives	31	86
6. - Certification	36	100
7. - Team Approach	34	94
8. - Inservice	34	94
9. - Support Services	36	100
10. - Community Resources	32	89
11. - Articulation	32	89
12. - Time Allotment	36	100
13. - Organizational Patterns	34	94
14. - Record Keeping	33	92
15. - Outreach to Community	35	97
16. - Appropriate Programs	32	89
17. - Content Reading	32	89
18. - Media Center	34	94
19. - Positive Attitude	31	86
20. - Inventory & Category	25	69
21. - New Materials	36	100
22. - Use of Materials	36	100
23. - Variety of Appropriate Materials	31	86
24. - Physical Arrangement	35	97
25. - Accountability	33	92
26. - Basic Literacy	35	97
27. - Test Data	35	97
28. - Publicize Data	35	97

Standards - 1, 6, 9, 12, 21, and 22; (2) 33 (92%) to 35 (97%) schools met Reading Standards 2, 4, 7, 8, 13, 14, 15, 18, 24, 25, 26, 27, and 28; (3) 30 (83%) to 34 (89%) schools met Reading Standards 3, 5, 10, 11, 16, 17, 19, and 23. Only 69% of the schools (25 of 36 schools) met Standard 20. These results suggest that the staffs of participating schools were achievement motivated in their attempt to meet the Standards for Successful Reading Programs.

Critical Standards

Table 7 summarizes information for the 36 schools on the four critical Standards (columns 2-5) for school years 1977-78 and 1978-79. Column 6 shows the total number of critical Standards met by schools both when they entered Project STAR and as of May 30, 1979. Column 7 shows the length of time each school was involved in Project STAR (first year, September 1978-June 1979; second year, September 1977-June 1979; and third year, September 1976-June 1979).

For each school year within a column (2-5), any of the four critical Standards could be met by each of the 36 participating schools. The column totals show both the numbers and percentage of Standards met for all 36 schools. As can be seen in Table 7, the results show that considerable gains were made by the schools in meeting the critical Standards over the two-year period as verified by the Validation Team. The percentage range of increase toward meeting these critical Standards ranged from a high of 58% to a low of 23%. The increase in the number of met critical Standards suggests these Standards were met:

1. Standard 16 - School staff had developed an appropriate instructional reading program that was addressing the instructional needs of identified groups of students in the school.
2. Standard 27 - School staff were utilizing the results from informal diagnostic and formal standardized achievement devices as a basis for making necessary changes in the instructional activities for individual students.
3. Standard 4 - School staffs had identified groups of students in their schools having similar reading instructional needs.

Status Data as of December 1977 & May 30, 1979 for Project STAR Schools on
Critical Standards of Successful Reading Programs

Critical Standards	Standard 4		Standard 16		Standard 25		Standard 27		Total Number		Length of Time in Project STAR
	Identified		Appropriate		Student MAP		Using Test		of		
	Instructional		Instruction		Scores		Results As		Critical		
	Population		For		Meeting		Basis For		Standards		
School	Groups of		Population		Maryland		Changes In		Met		(Years)
	Students		Groups		Norms		Instruction		as		
	77	78	77	78	77	78	77	78	of	of	
	78	79	78	79	78	79	78	79	12/77	5/79	
1	X	X	X	X	X	X	X	X	4	4	3
2	X	X	X	X	0	0	X	X	3	3	3
3	0	X	0	X	X	X	0	X	1	4	2
4	X	X	X	X	X	X	X	X	4	4	2
5	0	X	X	X	0	X	0	X	1	4	2
6	0	X	0	X	X	X	0	X	1	4	2
7	0	X	0	X	X	X	0	X	1	4	2
8	0	X	0	X	X	X	X	X	2	4	2
9	0	X	0	0	X	0	0	X	1	2	2
10	0	X	0	X	0	X	0	X	0	4	2
11	0	X	0	X	X	X	0	X	1	4	2
12	X	X	0	X	X	X	X	X	3	4	2
13	X	X	0	X	0	X	0	X	1	4	2
14	0	X	0	X	X	X	0	X	1	4	2
15	X	X	X	X	0	X	0	X	2	4	2
16	X	X	0	X	X	X	X	X	3	4	2
17	X	X	0	X	0	X	0	X	1	4	2
18	0	X	0	X	0	X	0	X	0	4	2
19	X	X	X	X	X	X	X	X	4	4	2
20	0	0	0	0	X	0	0	0	1	1	2
21	X	X	0	X	X	X	X	X	3	4	2
22	NA	X	NA	X	NA	X	NA	X	NA	4	1
23	X	X	X	X	X	X	0	X	3	4	2
24	X	X	0	X	0	X	0	X	1	4	2
25	0	X	0	X	0	X	X	X	1	4	2
26	X	X	X	X	X	X	X	X	4	4	1
27	0	X	0	X	X	X	0	X	1	4	1
28	X	X	X	X	X	X	X	X	4	4	3
29	X	X	X	X	X	X	X	X	4	4	2
30	0	X	0	X	X	X	X	X	2	4	2
31	0	X	0	X	X	X	0	X	1	4	2
32	X	X	X	X	X	X	X	X	4	4	2
33	X	X	X	X	X	X	X	X	4	4	2
34	0	X	0	X	X	X	0	X	1	4	2
35	X	X	X	X	X	X	X	X	4	4	2
36	X	X	0	0	0	X	0	X	1	4	2
Number of met Standards											
Total 36	19	35	12	33	25	33	16	35			
(%)											
100	53%	97%	36%	91%	69%	92%	44%	97%			
Increase %	44%		55%		23%		53%				
Total Standards			73		136						
144											
(%)											
100 %			51%		94%						
Increase %			42%								

* X = Standard Met by a School

** To meet this Standard, schools needed to have Maryland Accountability Program scores in reading comprehension that did not have statistically significant negative residuals from 1974-1977.

*** 1 = First Year Schools - September 1978 to June 1979.

2 = Second Year Schools - September 1978 to June 1979.

3 = Third Year Schools - September 1976 to June 1979.

4. Standard 25 - Student reading achievement scores of the school population were about equal to, at, or above the declared expected schools' reading achievement levels as defined by the Maryland Accountability Program.

In general, an examination of column 6 shows that of the total number of critical Standards (144 = 100%) that could be met, 73 (51%) had been met in school year 1977-78 and 136 (94%) had been met as of May 30, 1979 - an overall increase of 43%.

DISCUSSION

The data from Part Three of this report suggest the following questions concerning the Standards for Successful Reading Programs: (1) Did change occur? (2) How likely is it that the observed effect was a result of the intervention? (3) Was the effect consistent enough and observed often enough to have made an impact on the program, participants and/or materials used? (4) Was the effect educationally important?

First, based on the information collected, changes in the school reading programs on the Standards for Successful Reading Programs did occur; school reading programs on the Standards progressed from a status of not being met or partially being met to a status of being met in most instances by schools participating in Project STAR.

Second, the observed outcomes (i.e., met Standards) were closely tied to the specific interventions used in Project STAR, namely, (1) the application of the Standards as a general guide for bringing reading program improvement into the schools, (2) the development and implementation of Project STAR Action Plans by school staffs, and (3) the application of the Project STAR Documentation Process in the validation and revalidation system as a mechanism for monitoring and managing the school reading programs. Here, the Standards provided the framework; the Action Plans provided the foundations and prescriptions for the desired change to occur in the future; the application of the Action Plans to the reading programs fostered school reading program change; and the Documentation Process provided the feedback mechanism to schools as to whether or not schools were on target in making needed changes in the reading programs.

Third, the effect (i.e., met Standards) was observed consistently enough and often enough to have made an impact on the school reading programs.

Fourth, the outcomes presented in the data suggest that the reading program strategies applied were educationally important to school staffs.

PART FOUR

C--THE TEACHER-STAFF PERCEPTION STUDY

GOAL STATEMENT

The third study of this evaluation report involved determining the priority of reading program needs (an index of criticality) as perceived by teacher-staff participants who were involved in Project STAR schools. The needs assessment approach was viewed herein as a systematic evaluation procedure for establishing educational reading priorities through the applications of the criticality concept.

Kaufman and Harsh (1969) define a need as the discrepancy between "what is" and "what should be." Thus, in this study an effort was made to validate statements about the Standards and Program Clusters for Successful Reading Programs by reviewing the perceived teacher-staff importance of the Standard and Cluster (what should be) and comparing the results to an appraisal of how each statement about a Standard is functioning in the participating schools' reading programs (what is).

METHODS

Subjects

In school year 1977-78, teachers and staff (total N = 814) from 36 public schools participated in this study. For school year 1978-79, both the total number of schools (N = 33) and teachers and staff (N = 589) were lower due to school withdrawals, school staff transfers, and other attrition factors. For both school years, five of Maryland's 24 local education agencies participated in this study.

Instrumentation

In order to focus on the affective dimension of teacher-staff concerned with Project STAR, a Teacher/Staff Perception Questionnaire (Appendix F) was developed by the Maryland State Department of Education. This self-report instrument, consisting of 68 statements/items (one or more statement(s)/item(s)), was developed to reflect both the Standards

and Program Cluster considerations of this study. The relationship between Program Clusters Reading Standards and items on the Staff Perception Instrument is shown in Table 8.

The instrument is divided into two parts, each containing 34 statement(s)/item(s). The instrument was designed to indicate areas of convergence and divergence among (1) written evidence of met Standards; (2) behavioral evidence of a met Standard; (3) effectiveness of written materials; and (4) the importance of participants' statements about the Standards. Additionally, the instrument served (1) to provide individual teacher input into the evaluative process; (2) to assess the reading program, not individual teachers; (3) to identify, in combination with written and behavioral evidence, Cluster areas of the reading program which needed redirection; and (4) to measure, on a post-test basis, program change or trends as perceived by the local school staff. Figure 8 provides a flow chart of activities used in the development of the staff perception survey instrument and its analysis.

Procedures

The evaluation design used for this study is identified as a One Group Pre-test, Post-test Design. In both school years 1977-78 (pre-observation, fall 1977), and 1978-79 (post-observation, spring 1979), each school's Project STAR Resource Teacher administered the Teacher/Staff Perception Questionnaire to Project STAR teachers and aides at two staff meetings held during the documentation stage of Project STAR. The school staff members had the option of either anonymously completing the instruments during the staff meetings or completing the instrument outside the meetings and returning the questionnaire to designated Project STAR Team members.

Computer Analysis

The data obtained from the questionnaire was keypunched, and a unique Fortran IV computer program procedure (Appendix G) was written for use on the UNIVAC 1108 Time/Sharing-Multi-Processor System (Hardware). The format, results, and analysis of the critical educational needs and strengths identified by teacher/staff on Standards and

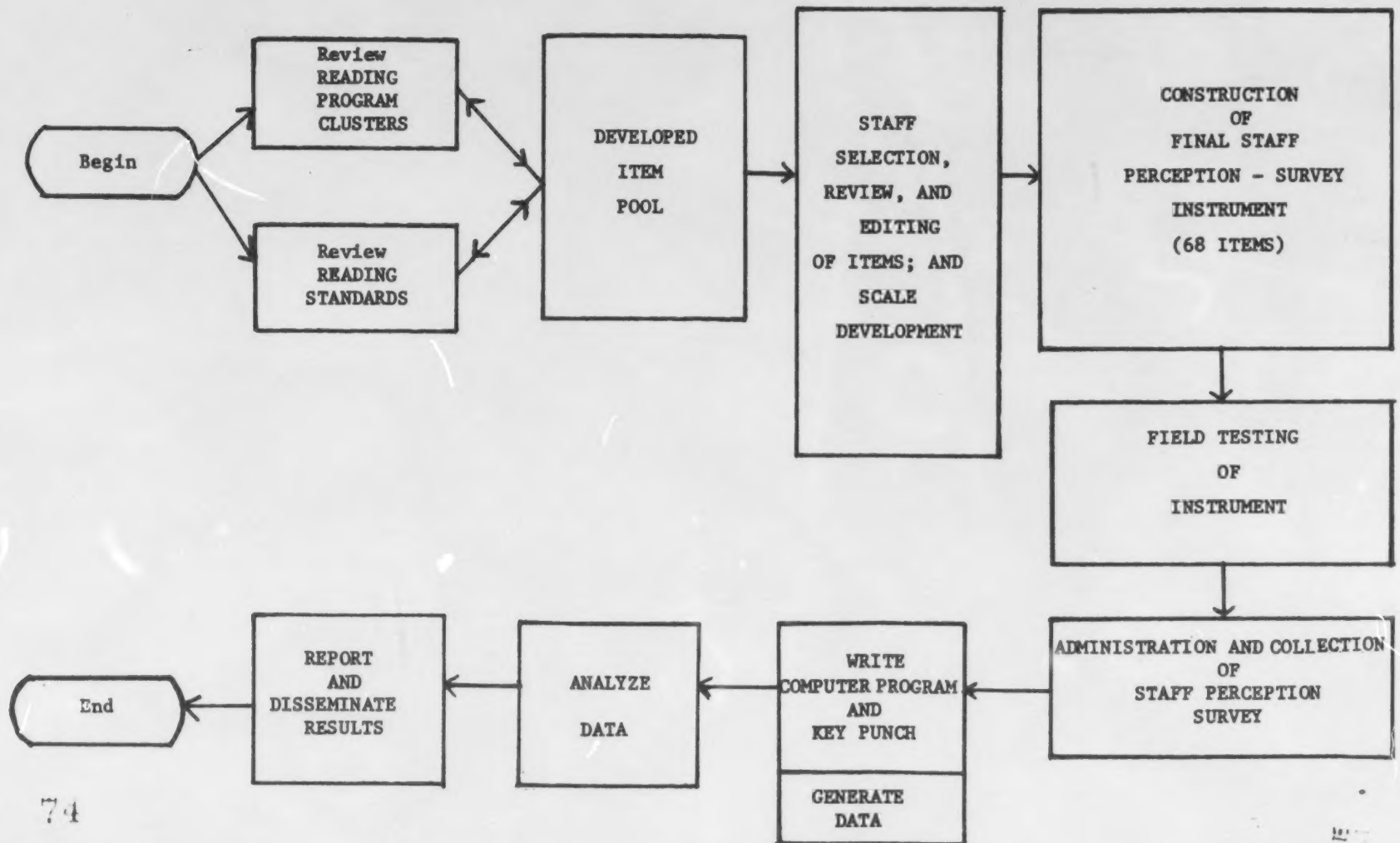
TABLE 8

READING PROGRAM CLUSTERS, READING STANDARDS, AND STAFF PERCEPTION ITEMS RELATIONSHIP.

READING PROGRAM CLUSTERS	STANDARDS FOR READING PROGRAMS	STAFF PERCEPTION SURVEY ITEMS
I. Philosophy, Goals and Objectives	1; 2; and 3.	1, 2; 3, 4, 5, 40; and 63, 67
II. Assessment	27; 14; 26; 25; and 28.	8, 9, 36; 10, 11, 12, 13; 14, 16, 17, 18; 15, 18, 40; and 13, 14, 15
III. Program Development	20; 21; 22; 17; 18; and 10.	24; 19, 20, 21, 22, 23; 25, 26, 27; 28; 29, 30, 44; 31; and 32, 33, 34.
IV. Appropriate Program	4; 5; 16; 23; and 19.	35, 36, 37, 38, 39; 40, 41; 42; 43; 44, 45; and 46, 47, 48.
V. Program Management	7; 9; 12; 13; and 24.	35, 47, 50, 51, 52; 53; 54, 55; 56, 37; and 58, 59.
VI. Articulation	11; 15; 3; and 28.	49, 60, 61, 62; 63; 6, 7, 63; and 13, 14, 15.
VII. Staff Development	6, and 8.	41, 64, 65, 66, 67, and 68.

FIGURE 8

SPECIFICATIONS FOR STAFF PERCEPTION SURVEY INSTRUMENTATION AND ANALYSIS



Clusters for the two-year period are discussed in the following section.

Measurement and Interpretation of Results

Table 9 provides a sample illustration of interpretation of results of the Staff Perception Survey Instrument. The sample presents information for 68 items comprising the survey instrument according to three different classifications. The first (column 2) is identified as the Ideal-Degree of Importance-Weight classification. This classification, for example, shows the average "strength" given to an item (Standard or Cluster) by all participants in a school. The second (column 3) is stated in terms of the Actual-School Status-Rating classification. This column shows the degree to which participants agree that the item (Reading Standard or Program Cluster) is operational in the school reading program. Finally, the third classification (column 4) is labelled as the Priority-Index. This classification indicates (1) the extent to which there is a discrepancy between the ideal and actual status of the statement/item and (2) the identification of areas which receive priority importance. High priority indicates a desire on the part of staff for some intervention (need) while a low priority indicates that staff felt the item (Standard or Cluster) is a strength that should be maintained at its current level or refined if need be. In other words, indices at or below 10 (Table 9 - the Explanation of Data Column, Item (1)) indicate non-critical area (strength) of the reading program. Indices above 10 (Table 9 - the Explanation of Data Column, Item (2)) indicate the staff considered the item as a critical reading program area (need) requiring attention.

In order to compute an Index Value, three things are necessary: (1) the average weight of the item(s); (2) the average rating of the school environment on the item(s); and (3) the insertion of (1) and (2) into the formula: $(\text{weight}) \times 6 - \text{rating}$.

RESULTS OF THE STAFF PERCEPTION SURVEY

General

This study presents results from the staff perception survey in

9

Sample of Results from Project STAR Teacher/Staff Perception Survey*
School Year 1977-1978

TOTAL:								
ITEM (1)	"IDEAL" DEGREE OF IMPORTANCE (WEIGHT) (2)	"ACTUAL" SCHOOL STATUS (RATING) (3)	"PRIORITY" INDEX (4)	EXPLANATION OF DATA	ITEM (1)	"IDEAL" DEGREE OF IMPORTANCE (WEIGHT) (2)	"ACTUAL" SCHOOL STATUS (RATING) (3)	"PRIORITY" INDEX (4)
1	4.52	4.15	8.37	I. Example of low priority (strength) non-critical difference between "ideal and actual states."	35	4.05	3.68	9.40
2	4.45	4.21	7.98		36	4.61	4.19	8.36
3	4.57	4.08	8.78		37	4.44	4.11	8.41
4	4.43	4.04	8.71		38	4.67	4.30	7.97
5	4.50	4.11	8.49		39	4.74	4.24	8.35
6	4.69	3.98	9.47		40	4.49	3.94	9.26
7	4.26	3.59	10.28		41	4.48	3.63	10.62
8	4.45	4.01	8.87		42	4.49	3.94	9.24
9	4.65	4.17	8.52		43	4.59	4.07	8.84
10	4.55	4.18	8.28		44	4.70	3.97	9.53
11	4.46	3.95	9.13	II. Example of high priority (need) critical difference between "ideal and actual" states.	45	4.31	3.47	10.90
12	4.44	3.76	9.92		46	4.69	3.59	11.33
13	4.57	4.14	8.50		47	4.57	3.50	11.41
14	4.16	3.38	10.88		48	4.74	4.09	9.09
15	4.51	4.23	7.99		49	4.70	4.03	9.23
16	4.51	3.99	9.07		50	4.34	3.73	9.87
17	4.51	3.98	9.12		51	4.31	3.73	9.78
18	4.25	3.63	10.07		52	4.43	3.76	9.93
19	3.99	3.49	10.02		53	4.46	3.75	10.02
20	4.22	3.56	10.29		54	4.55	3.71	10.42
21	4.53	3.84	9.79	III. Example of discrepancy between "ideal" and "actual" state.	55	4.53	3.40	11.78
22	4.45	3.64	10.49		56	4.54	3.63	10.76
23	4.37	3.52	10.81		57	4.65	3.72	10.60
24	4.29	3.69	9.89		58	4.63	3.30	12.52
25	4.47	3.64	10.54		59	4.68	3.60	11.25
26	4.43	3.65	10.41		60	4.65	3.64	10.98
27	4.37	4.01	8.69		61	4.16	3.26	11.42
28	4.56	3.70	10.51		62	3.95	3.25	10.87
29	4.54	3.95	9.29		63	4.58	3.86	9.80
30	4.53	3.66	10.58		64	4.48	3.44	11.47
31	4.58	3.82	9.96	↑	65	4.36	3.49	10.95
32	4.32	3.32	11.57		66	4.48	3.77	10.00
33	4.45	3.27	12.16		67	4.45	3.62	10.60
34	4.23	2.92	13.04		68	4.22	3.78	9.35

* See Appendix A for Description of Each Item

terms of both Reading Program Standards and Reading Program Cluster
Reading Program Standards

Tables 10 to 15 present a trend analysis of the 28 Reading Program Standards for school years 1977-78 and 1978-79. The results of staff perception on the Reading Standards are reported and analyzed in two ways. First, school staff data (all five local education agencies) are combined to give an overall impression of the Reading Standards. Second, school staff data is presented separately, i.e., school staff data from a given local education agency is analyzed.

Table 10 presents the status of the 28 Standards for Successful Reading Programs for all participating local education agencies in Maryland from school year 1977-78 to school year 1978-79. The table identifies each Standard, the corresponding item(s) to each Standard located in the Staff Perception instrument, and also a status by index breakdown of results for a given school year.

In general, there is a positive trend or pattern displayed for the Reading Standards. A positive (P) trend condition occurs when (1) school staffs perceived a Standard to be a need (N) in school year 1977-78 and a strength (S) in the following school year 1978-79; (2) school staffs perceive a Standard to be a strength (S) in the first year and a refined strength (RS) in the second year, or (3) school staffs perceive a Standard to be a need (N) in one year and a lesser need (LN) in the second year.

As Table 10 shows, 26 (93%) of the 28 (100%) Reading Standards for schools of all five local education agencies are included in positive conditions 1 and 2. The two remaining Standards (7%), Standard 10, *Community Resources*, and Standard 24, *Physical Arrangements*, are included in the positive condition 3 category.

Table 11 illustrates the status of the Reading Standards for schools of Local Education Agency #1. An examination of the results shows that the staffs of schools participating in Project STAR saw positive trends on the Standards being made to improve reading programs, i.e., 27 (96%) of the 28 (100%) Reading Standards. Standard 21 (4%), *Evaluation of*

TABLE 10

Estimated Status of Standards from School Year 1977-78 to 1978-79
Trend Analysis for Combined (N=5) Local Education Agencies

Reading Standards	Corresponding Item(s) to Each Standard on the Staff Perception Survey Instrument	Status of Standards				Trend
		School Year 1977-78		School Year 1978-79		
		Need or Strength	Index	Need, Strength Refined Strength	Index	
1- Point-of-View	1, 2	S	8.17	RS	6.63	F
2- Goals & Objectives	3, 4, 5, 40	S	8.81	RS	7.03	F
3- Dissemination of Objectives	6, 7, 63	S	9.88	RS	9.17	F
4- Student Grouping	35, 36, 37, 38, 39	S	8.55	RS	7.39	F
5- Group Objectives	40, 41	S	9.94	RS	8.10	F
6- Certification	68,	S	9.35	RS	8.13	F
7- Team Approach-Coordination	49, 50, 51, 52, 35	S	9.67	RS	8.06	F
8- Outgoing Inservice	64, 65, 66, 67, 41	N	10.73	S	8.75	P
9- Support Services	53	N	10.02	S	8.51	P
10- Community Resources	32, 33, 34	N	12.27	N	11.05	(P)
11- Articulation & Coordination	60, 61, 62, 49	N	10.72	S	8.84	F
12- Time Allotment	54, 55	N	11.10	S	9.10	F
13- Organization Patterns	56, 57	N	10.68	S	9.24	F
14- Record Keeping	10, 11, 12, 13	S	8.97	RS	7.47	F
15- Outreach Program	63	S	9.80	RS	8.04	F
16- Appropriate Programs	42, 43	S	9.05	RS	7.88	F
17- Content Reading	28, 29, 30, 44	S	9.98	RS	8.50	F
18- Media Center	31	S	9.96	RS	9.53	F
19- Positive Attitude	46, 47, 48	N	10.62	S	9.21	F
20- Inventory of Materials	24	S	9.89	RS	8.74	F
21- Evaluation of Materials	19, 20, 21, 22, 23	N	10.30	S	8.80	P
22- Instruction in Use of Materials	25, 26, 27	S	9.87	RS	8.62	F
23- Variety & Appropriate Materials	44, 45	N	10.26	S	9.28	F
24- Physical Arrangement	38, 59	N	11.89	N*	10.39	(F)
25- Achievement (Accountability)	15, 18, 40	S	9.13	RS	7.51	F
26- Functional Reading (Basic Literacy)	14, 16, 17, 18	S	9.82	RS	8.24	F
27- Use of Test Data for Instruction	8, 9, 36	S	8.59	RS	7.45	F
28- Publicized Test Data	13, 14, 15	S	9.19	RS	7.89	F

45

* = A continued need from school year 1977-78 to year 1978-79

N = Need F = Positive Trend

S = Strength (P) = Positive Trend still a need

RS = Refined Strength N = Negative Trend (i.e., going from the strength area into a needs area.)

LS = Lower Strength

TABLE 11

Estimated Status of Standards from School Year 1977-78 to 1978-79
Trend Analysis for LEA #1

Reading Standards	Corresponding Item(s) to Each Standard on the Staff Perception Survey Instrument	Status of Standards				Trend
		School Year 1977-78		School Year 1978-79		
		Need or Strength	Index	Need, Strength Refined Strength	Index	
1- Point-of-View	1, 2	S	9.19	RS	7.31	P
2- Goals & Objectives	3, 4, 5, 40	S	7.90	RS	7.12	P
3- Dissemination of Objectives	6, 7, 63	S	9.50	RS	8.86	P
4- Student Grouping	35, 36, 37, 38, 39	S	7.53	RS	7.26	P
5- Group Objectives	40, 41	S	9.96	RS	7.96	P
6- Certification	68,	S	8.84	RS	8.42	P
7- Team Approach-Coordination	49, 50, 51, 52, 35	S	8.98	RS	8.58	P
8- Outgoing Inservice	64, 65, 66, 67, 41	S	9.81	RS	9.47	P
9- Support Services	53	S	8.67	RS	7.72	P
10- Community Resources	32, 33, 34	S	9.53	RS	9.34	P
11- Articulation & Coordination	60, 61, 62, 49	N	10.01	S	8.73	P
12- Time Allotment	54, 55	S	9.76	RS	8.34	P
13- Organization Patterns	56, 57	S	8.97	LS	9.73	P
14- Record Keeping	10, 11, 12, 13	S	8.68	RS	7.73	P
15- Outreach Program	63	S	7.61	LS	8.20	P
16- Appropriate Programs	42, 43	S	8.01	RS	7.95	P
17- Content Reading	28, 29, 30, 44	S	9.48	RS	8.63	P
18- Media Center	31	S	8.85	RS	7.54	P
19- Positive Attitude	46, 47, 48	S	8.84	RS	8.31	P
20- Inventory of Materials	24	S	9.08	RS	8.23	P
21- Evaluation of Materials	19, 20, 21, 22, 23	S	8.90	S	8.90	P
22- Instruction in Use of Materials	25, 26, 27	S	8.22	RS	8.05	P
23- Variety & Appropriate Materials	44, 45	N	10.03	S	9.63	P
24- Physical Arrangement	38, 59	S	9.80	RS	9.18	P
25- Achievement (Accountability)	15, 18, 40	S	9.18	RS	7.71	P
26- Functional Reading (Basic Literacy)	14, 16, 17, 18	N	10.24	S	8.64	P
27- Use of Test Data for Instruction	8, 9, 36	S	7.86	RS	7.59	P
28- Publicized Test Data	13, 14, 15	S	8.97	RS	8.05	P

46

* = A continued need from school year 1977-78 to year 1978-79

N = Need

P = Positive Trend

N = 104

N = 56

S = Strength

(P) = Positive Trend still a need

RS = Refined Strength

N = Negative Trend (i.e., going from the strength area into a needs area.)

LS = Lower Strength

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Materials, had remained positive and stable over the two-year period.

Table 12 illustrated the status of the Standards for Successful Reading Programs generated by staffs of schools in Local Education Agency #2 that participated in Project STAR. In this table, 25 (88%) of the 28 (100%) Reading Standards were viewed by school staffs as having made positive progress toward improvement in their reading programs over the two-year period. Standard 4, *Student Grouping*, was a strength the first year and a lower strength the second year. Standard 10 (4%), *Community Resources*, was viewed as a need that existed in school year 1977-78 that had diminished somewhat by school year 1978-79. Standard 6 (4%), *Certification*, remained positive and stable. Only Standard 23 (4%), *Variety and Appropriate Materials*, showed a reverse trend, namely, an area of strength in school year 1977-78 became an area of need in the next school year.

Table 13 presents the status of the Standards for Successful Reading Programs of school staffs of Local Education Agency #3 who participated in Project STAR. Of the 28 Standards, 21 (75%) Standards are shown to have made positive progress over the two-year period. Five Standards (17%), namely, Standard 10, *Community Resources*; Standard 13, *Organizational Patterns*, Standard 19, *Positive Attitudes*; Standard 23, *Variety and Appropriate Materials*; and Standard 24, *Physical Arrangement*, can be viewed as needs that diminished and would require further intervention. Standard 21 (4%), *Evaluation of Materials*, was perceived to be an area of increased need over time. Finally, Standard 18 (4%), *Media Center*, was viewed in school year 1977-78 to be an area of strength but for some reason(s) was observed as an area of need for school year 1978-79.

Table 14 presents the status of the Standards for Successful Reading Programs for schools of Local Education Agency #4 that participated in Project STAR. An examination of the results shows in general that progress was made in all 28 (100%) Reading Standards.

Table 15 shows the status of the Standards for Successful Reading Programs for schools of Local Education Agency #5. Of the 28 Standards

TABLE 12

Estimated Status of Standards from School Year 1977-78 to 1978-79
Trend Analysis for LEA #2

Reading Standards	Corresponding Item(s) to Each Standard on the Staff Perception Survey Instrument	Status of Standards				Trend
		School Year 1977-78		School Year 1978-79		
		Need or Strength	Index	Need, Strength Refined Strength	Index	
1- Point-of-View	1, 2	S	8.71	RS	6.80	P
2- Goals & Objectives	3, 4, 5, 40	S	8.41	RS	7.41	P
3- Dissemination of Objectives	6, 7, 63	S	9.56	RS	9.07	P
4- Student Grouping	35, 36, 37, 38, 39	S	7.93	RS	9.09	P
5- Group Objectives	40, 41	S	9.68	RS	8.90	P
6- Certification	68,	S	8.85	RS	8.85	P
7- Team Approach-Coordination	49, 50, 51, 52, 35	S	9.32	RS	8.24	P
8- Outgoing Inservice	64, 65, 66, 67, 41	S	9.89	RS	9.24	P
9- Support Services	53	S	8.99	LS	9.58	P
10- Community Resources	32, 33, 34	N	13.13	N *	11.85	(P)
11- Articulation & Coordination	60, 61, 62, 49	S	9.48	RS	9.36	P
12- Time Allotment	54, 55	N	10.38	S	9.27	P
13- Organization Patterns	56, 57	S	9.66	RS	9.42	P
14- Record Keeping	10, 11, 12, 13	S	8.91	RS	8.53	P
15- Outreach Program	63	S	9.00	RS	8.57	P
16- Appropriate Programs	42, 43	S	8.84	RS	8.17	P
17- Content Reading	28, 29, 30, 44	N	10.09	S	8.91	P
18- Media Center	31	N	10.99	S	9.89	P
19- Positive Attitude	46, 47, 48	N	11.12	S	9.69	P
20- Inventory of Materials	24	S	9.05	LS	9.38	P
21- Evaluation of Materials	19, 20, 21, 22, 23	S	9.90	RS	8.93	P
22- Instruction in Use of Materials	25, 26, 27	S	9.60	RS	8.63	P
23- Variety & Appropriate Materials	44, 45	S	9.92	N *	10.12	N
24- Physical Arrangement	38, 59	N	10.40	S	9.76	P
25- Achievement (Accountability)	15, 18, 40	S	9.05	RS	7.92	P
26- Functional Reading (Basic Literacy)	14, 16, 17, 18	N	10.23	S	8.08	P
27- Use of Test Data for Instruction	8, 9, 36	S	8.74	RS	7.95	P
28- Publicized Test Data	13, 14, 15	S	8.69	RS	7.60	P

48

* = A continued need from school year 1977-78 to year 1978-79

N = Need

P = Positive Trend

N = 114

N = 115

S = Strength

(P) = Positive Trend still a need

RS = Refined Strength

N = Negative Trend (i.e., going from the strength area into a needs area.)

LS = Lower Strength

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TABLE 13

Estimated Status of Standards from School Year 1977-78 to 1978-79
Trend Analysis for LEA #3

Reading Standards	Corresponding Item(s) to Each Standard on the Staff Perception Survey Instrument	Status of Standards				Trend
		School Year 1977-78		School Year 1978-79		
		Need or Strength	Index	Need, Strength Refined Strength	Index	
1- Point-of-View	1, 2	S	9.59	RS	7.27	P
2- Goals & Objectives	3, 4, 5, 40	S	9.78	RS	8.13	P
3- Dissemination of Objectives	6, 7, 63	N	11.35	S	9.95	P
4- Student Grouping	35, 36, 37, 38, 39	S	9.32	RS	8.11	P
5- Group Objectives	40, 41	N	11.36	S	9.13	P
6- Certification	68,	N	10.74	S	8.87	P
7- Team Approach-Coordination	49, 50, 51, 52, 35	N	10.87	S	9.02	P
8- Outgoing Inservice	64, 65, 66, 67, 41	N	13.15	S	9.76	P
9- Support Services	53	N	11.80	S	9.31	P
10- Community Resources	32, 33, 34	N	12.65	N *	12.18	(P)
11- Articulation & Coordination	60, 61, 62, 49	N	12.02	S	9.92	P
12- Time Allotment	54, 55	N	12.33	S	9.57	P
13- Organization Patterns	56, 57	N	12.48	N *	10.57	(P)
14- Record Keeping	10, 11, 12, 13	N	10.46	S	9.92	P
15- Outreach Program	63	N	11.76	S	9.42	P
16- Appropriate Programs	42, 43	S	9.94	RS	9.47	P
17- Content Reading	28, 29, 30, 44	N	10.72	S	9.88	P
18- Media Center	31	S	9.68	N *	10.29	N
19- Positive Attitude	46, 47, 48	N	11.45	N *	10.93	(P)
20- Inventory of Materials	24	N	10.15	S	9.23	P
21- Evaluation of Materials	19, 20, 21, 22, 23	N	10.21	N *	10.84	N
22- Instruction in Use of Materials	25, 26, 27	N	10.52	S	9.84	P
23- Variety & Appropriate Materials	44, 45	N	10.90	N *	10.75	(P)
24- Physical Arrangement	38, 59	N	12.70	N *	10.68	(P)
25- Achievement (Accountability)	15, 18, 40	S	9.99	RS	9.23	P
26- Functional Reading (Basic Literacy)	14, 16, 17, 18	N	10.91	S	9.61	P
27- Use of Test Data for Instruction	8, 9, 36	S	9.80	RS	9.57	P
28- Publicized Test Data	13, 14, 15	S	9.89	RS	8.58	P

49

* = A continued need from school year 1977-78 to year 1978-79

N = Need

S = Strength

RS = Refined Strength

LS = Lower Strength

P = Positive Trend

(P) = Positive Trend still a need

N = Negative Trend (i.e., going from the strength area into a needs area.)

N = 111

N = 78

TABLE 14

Estimated Status of Standards from School Year 1977-78 - 1978-79
Trend Analysis for LEA #4

Reading Standards	Corresponding Item(s) to Each Standard on the Staff Perception Survey Instrument	Status of Standards				Trend
		School Year 1977-78		School Year 1978-79		
		Need or Strength	Index	Need, Strength Refined Strength	Index	
1- Point-of-View	1, 2	S	8.98	RS	6.95	P
2- Goals & Objectives	3, 4, 5, 40	S	7.23	RS	5.70	P
3- Dissemination of Objectives	6, 7, 63	S	9.51	RS	6.71	P
4- Student Grouping	35, 36, 37, 38, 39	S	7.91	RS	5.81	P
5- Group Objectives	40, 41	N	10.30	S	6.91	P
6- Certification	68,	S	9.09	RS	6.23	P
7- Team Approach-Coordination	49, 50, 51, 52, 35	S	9.70	RS	6.75	P
8- Outgoing Inservice	64, 65, 66, 67, 41	N	10.26	S	7.03	P
9- Support Services	53	N	10.24	S	7.07	P
10- Community Resources	32, 33, 34	N	13.18	S	8.69	P
11- Articulation & Coordination	60, 61, 62, 49	S	9.28	RS	5.73	P
12- Time Allotment	54, 55	S	9.99	RS	6.02	P
13- Organization Patterns	56, 57	N	11.22	S	6.52	P
14- Record Keeping	10, 11, 12, 13	S	8.73	RS	5.33	P
15- Outreach Program	63	S	9.79	RS	5.47	P
16- Appropriate Programs	42, 43	S	9.41	RS	6.11	P
17- Content Reading	28, 29, 30, 44	N	11.78	S	7.05	P
18- Media Center	31	N	10.97	S	8.16	P
19- Positive Attitude	46, 47, 48	N	11.77	S	6.93	P
20- Inventory of Materials	24	N	12.10	S	6.66	P
21- Evaluation of Materials	19, 20, 21, 22, 23	N	11.97	S	8.68	P
22- Instruction in Use of Materials	25, 26, 27	N	10.05	S	7.17	P
23- Variety & Appropriate Materials	44, 45	N	10.87	S	7.27	P
24- Physical Arrangement	38, 59	S	9.89	RS	6.60	P
25- Achievement (Accountability)	15, 18, 40	S	8.59	RS	6.17	P
26- Functional Reading (Basic Literacy)	14, 16, 17, 18	S	9.25	RS	6.72	P
27- Use of Test Data for Instruction	8, 9, 36	S	7.31	RS	5.65	P
28- Publicized Test Data	13, 14, 15	S	8.01	RS	5.71	P

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50

* = A continued need from school year 1977-78 to year 1978-79

N = Need

P = Positive Trend

N = 19

N = 19

S = Strength

(P) = Positive Trend still a need

RS = Refined Strength

N = Negative Trend (i.e., going from the strength area into a needs area)

LS = Lower Strength

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50

TABLE 15

Estimated Status of Standards from School Year 1977-78 to 1978-79
Trend Analysis for LEA #5

Reading Standards	Corresponding Item(s) to Each Standard on the Staff Perception Survey Instrument	Status of Standards				Trend
		School Year 1977-78		School Year 1978-79		
		Need or Strength	Index	Need, Strength Refined Strength	Index	
1- Point-of-View	1, 2	S	7.40	PS	6.19	P
2- Goals & Objectives	3, 4, 5, 40	S	8.92	RS	6.58	P
3- Dissemination of Objectives	6, 7, 63	S	9.69	RS	7.34	P
4- Student Grouping	35, 36, 37, 38, 39	S	8.76	RS	7.20	P
5- Group Objectives	40, 41	S	9.60	RS	7.50	P
6- Certification	68,	S	9.24	RS	7.72	P
7- Team Approach-Coordination	49, 50, 51, 52, 35	S	9.58	RS	7.48	P
8- Outgoing Inservice	64, 65, 66, 67, 41	N	10.54	S	8.10	P
9- Support Services	53	N	10.07	S	7.97	P
10- Community Resources	32, 33, 34	N	12.51	N *	10.56	-(P)
11- Articulation & Coordination	60, 61, 62, 49	N	10.88	S	8.48	P
12- Time Allotment	54, 55	N	11.31	S	8.93	P
13- Organization Patterns	56, 57	N	10.85	S	8.54	P
14- Record Keeping	10, 11, 12, 13	S	8.66	RS	6.47	P
15- Outreach Program	63	N	10.00	S	7.53	P
16- Appropriate Programs	42, 43	S	9.11	RS	7.31	P
17- Content Reading	28, 29, 30, 44	S	9.80	RS	7.81	P
18- Media Center	31	S	9.99	RS	9.36	P
19- Positive Attitude	46, 47, 48	N	10.67	S	8.68	P
20- Inventory of Materials	24	N	10.10	S	8.48	P
21- Evaluation of Materials	19, 20, 21, 22, 23	N	10.64	S	7.99	P
22- Instruction in Use of Materials	25, 26, 27	N	10.12	S	8.30	P
23- Variety & Appropriate Materials	44, 45	N	10.20	S	8.43	P
24- Physical Arrangement	38, 59	N	12.59	N *	10.72	(P)
25- Achievement (Accountability)	15, 18, 40	S	8.91	RS	6.93	P
26- Functional Reading (Basic Literacy)	14, 16, 17, 18	S	9.37	RS	7.83	P
27- Use of Test Data for Instruction	8, 9, 36	S	8.46	RS	6.73	P
28- Publicized Test Data	13, 14, 15	S	9.23	RS	7.82	P

* = A continued need from school year 1977-78 to year 1978-79

N = 466

N = 370

N = Need

P = Positive Trend

S = Strength

(P) = Positive Trend still a need

RS = Refined Strength

N = Negative Trend (i.e., going from the strength area into a needs area.)

LS = Lower Strength

listed, 26 (93%) Standards can be viewed as showing positive growth from school year 1977-78 to school year 1978-79. Standard 10, *Community Resources*, and Standard 24, *Physical Arrangement*, were the only Standards (7%) viewed by school staffs as needs that diminished somewhat over time. In these instances, further intervention would be required if their Standards were to become areas of strength for the school reading programs.

Reading Program Clusters

Figures 9 to 14 present the trend analysis results from the staff perception survey on the seven Cluster groups for school years 1977-78 and 1978-79. In this section, the results from staff perception of the seven Project STAR Reading Program Cluster groups are discussed first for the five local education agencies taken as a whole (total state results) and, second, for each participating local education agency individually.

Figure 9 illustrates the staff perception results obtained from the five local education agencies taken as a whole. In general, there appears to be a positive trend in the perception of school staff from one year to the next on each of the Program Cluster groups. The direction of the trends illustrated within this figure displays two types of tendencies: (1) a given Program Cluster group moved from one area of need in school year 1977-78 into the area of strength such as in Cluster groups 3, 5, 6, and 7 for school year 1978-79 and (2) a particular Cluster group was perceived as a strength area in school year 1977-78 but was further refined for school year 1978-79 such as with Clusters 1, 2, and 4.

Figure 10 shows the Cluster by index trend analysis profile of results for participating school staffs from Local Education Agency #1. In this profile of the Project STAR Reading Program Clusters, the local education school staff (N = 104) in school year 1977-78 regarded all seven reading Cluster areas as perceived strengths while in school year 1978-79 they (N = 56) perceived these same Clusters to be in a

FIGURE 9

PROJECT STAR: Cluster by Index Trend Analysis - School Years 1977-78 to 1978-79
Total (N=5) State Level Results

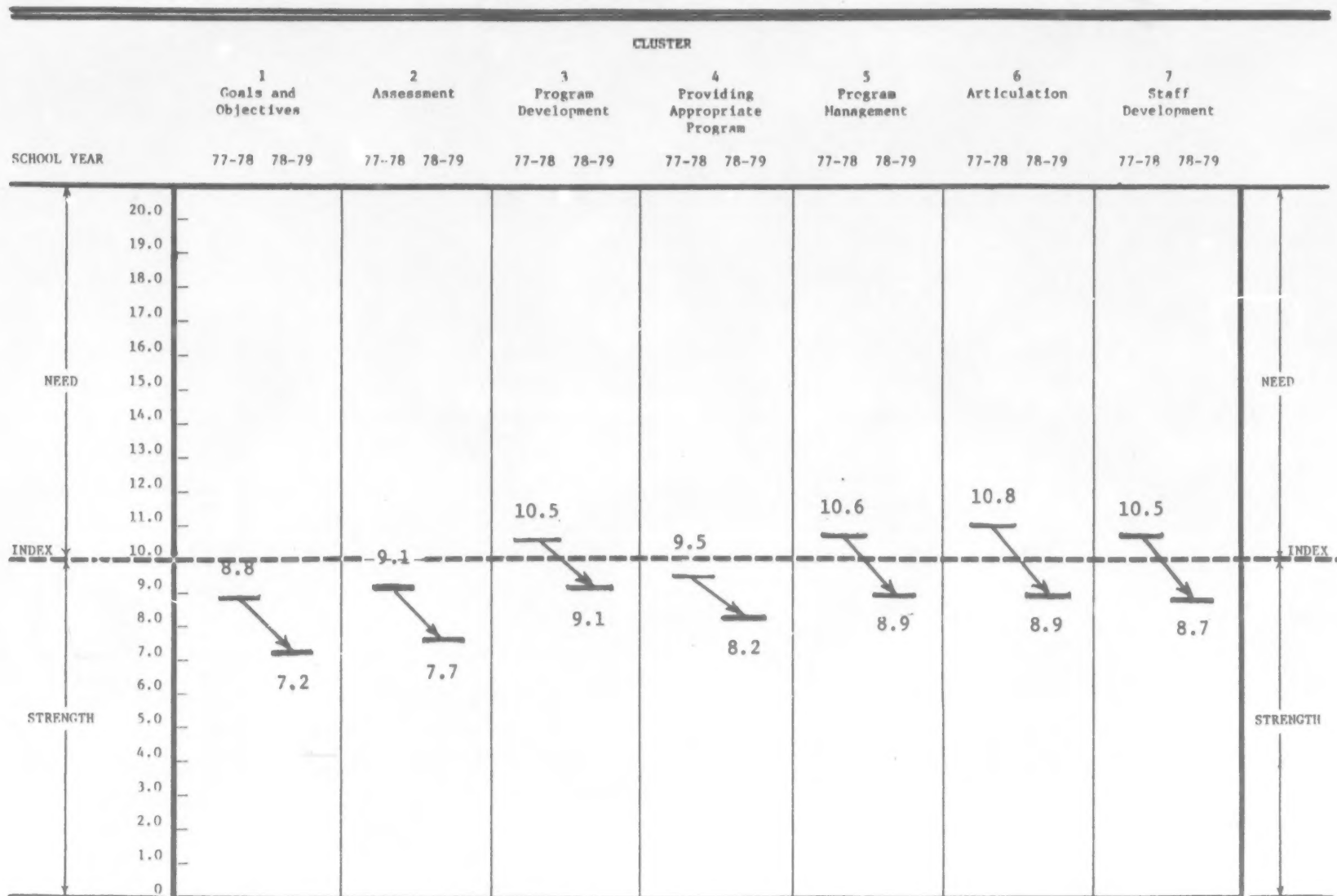
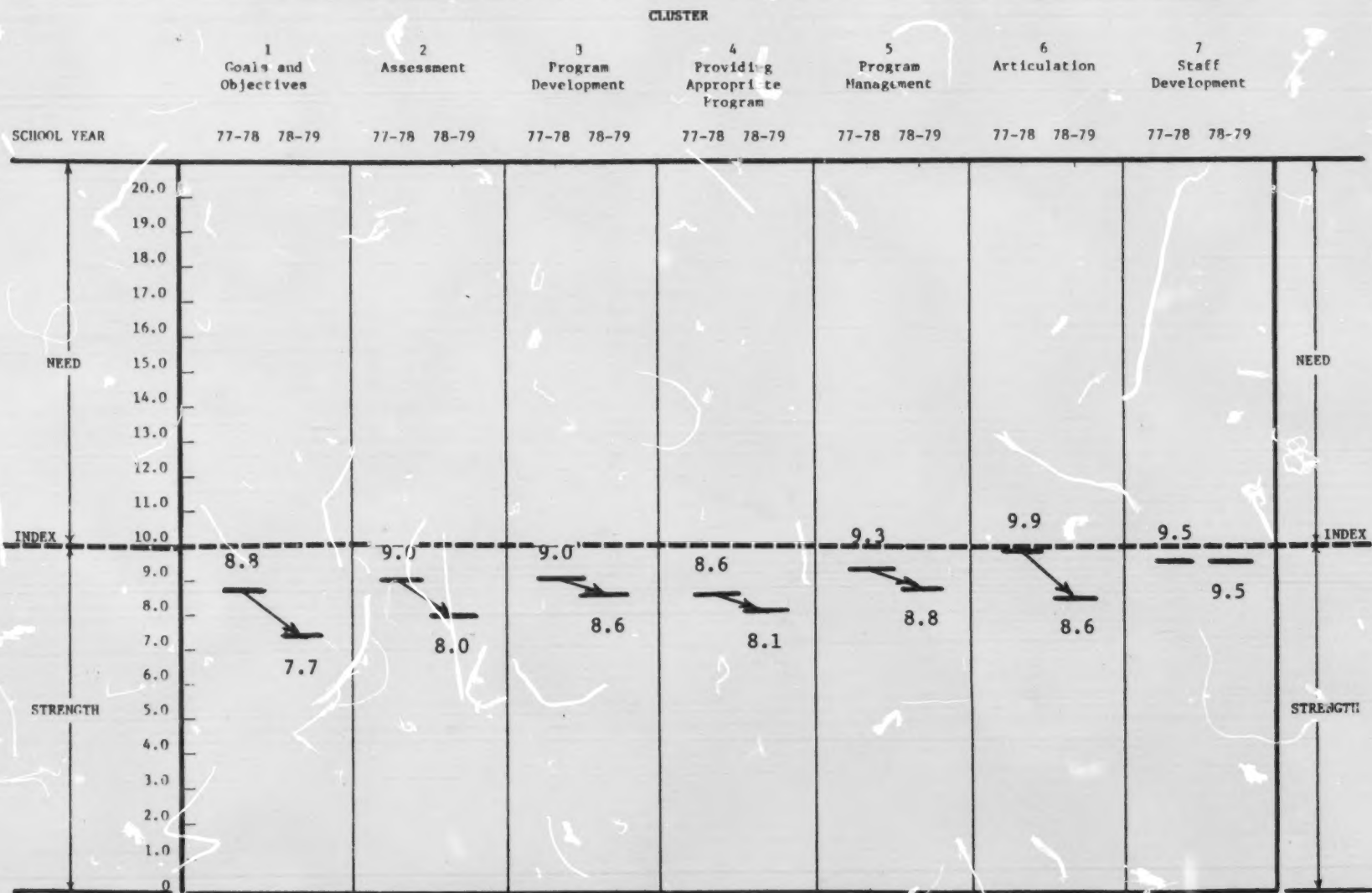


FIGURE 10

PROJECT STAR: Cluster by Index Trend Analysis - School Years 1977-78 to 1978-79
Schools of Local Education Agency #1



more refined strength state.

Figure 11 illustrates the Cluster by index trend analysis profile of results for the Local Education Agency #2 schools for school year 1977-78 (N = 114) and school year 1978-79 (N = 115). Here, we can see the local education staff regarded six of the seven Reading Program Cluster areas as perceived strengths in the first year of study and as refined strengths in the second year of this study. The only exception to this pattern was Cluster 3, *Program Development*. In this case, the school staff saw the Cluster area as one of its needs in school year 1977-78. In school year 1978-79, *Program Development* was viewed as a strength which is indicative of perceived growth in this Cluster area.

Figure 12 presents the trend analysis profile of results of the Local Education Agency #3 school staffs who participated in Project STAR. For this local education agency, school staff (N = 19) observed that several Reading Cluster program areas were viewed as strengths in 1977-78 and refined strengths in 1978-79, namely, Program Cluster areas 1, *Goals and Objectives*, 2, *Assessment*; 4, *Providing Appropriate Program*; 6, *Articulation*; and 7, *Staff Development*. Two Cluster areas 3, *Program Development* and 5, *Program Management* were viewed by school staff members as a need area in 1977-78 and a strength area in 1978-79.

Figure 13 presents the Cluster by index trend analysis profile of results for Local Education Agency #4. For school year 1977-78, the four Cluster areas of *Program Development*, *Program Management*, *Articulation*, and *Staff Development* were noticed by school staff members to be in need of intervention. The results in school year 1978-79 show that the school staffs observed that improvement had been made in these Cluster areas. A glimpse at the results of Cluster 1, *Goals and Objectives*; 2, *Assessment*; and 3, *Providing Appropriate Programs*, shows that these particular Clusters were viewed as areas of strength in school year 1977-78 and as areas of somewhat greater strength in school year 1978-79.

Figure 14 presents the Cluster by index trend analysis profile of

FIGURE 11

PROJECT STAR: Cluster by Index Trend Analysis - School Years 1977-78 to 1978-79
Schools of Local Education Agency #2

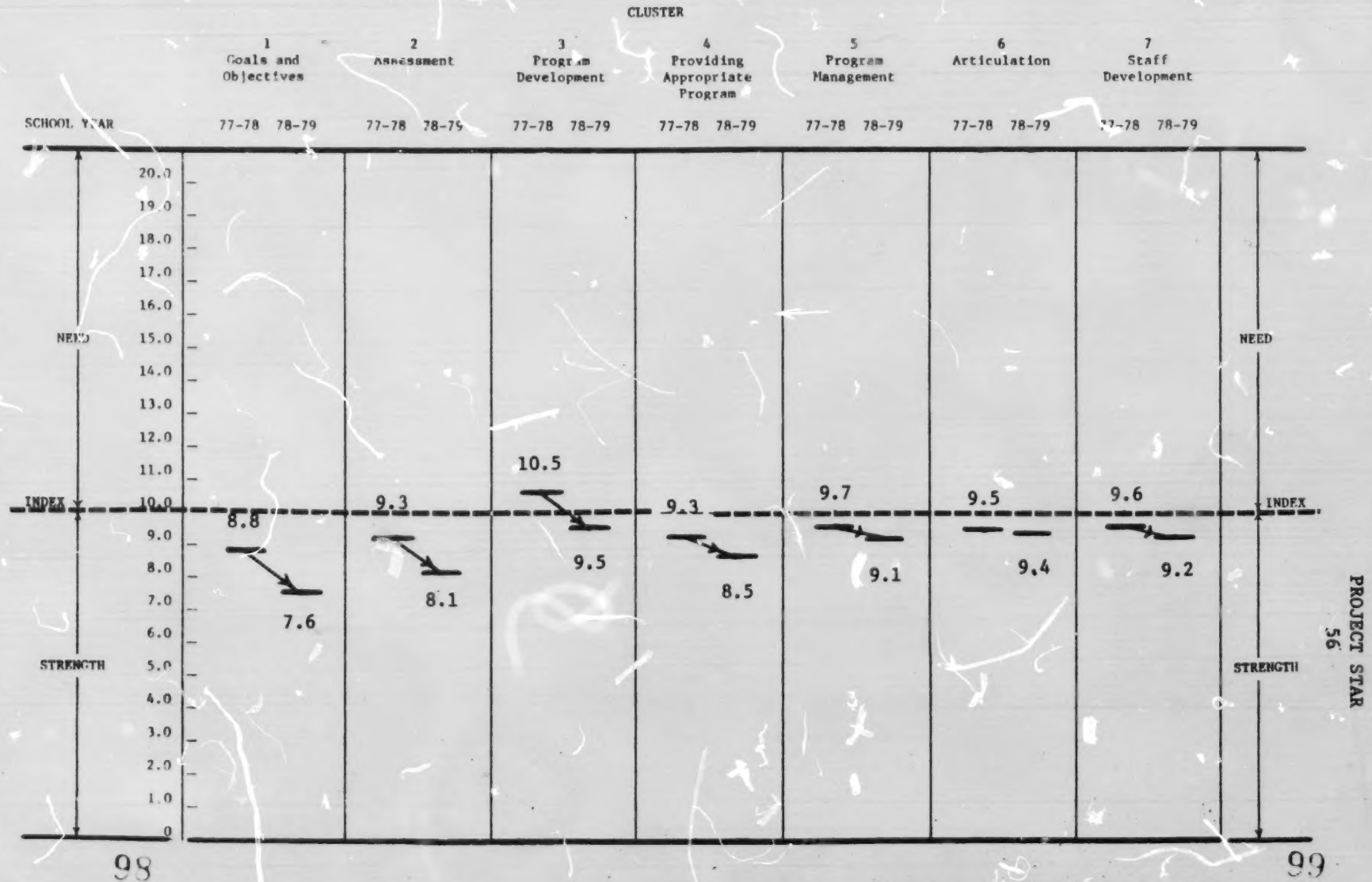


FIGURE 12

PROJECT STAR: Cluster by Index Trend Analysis - School Years 1977-78 to 1978-79
School of Local Education Agency #3

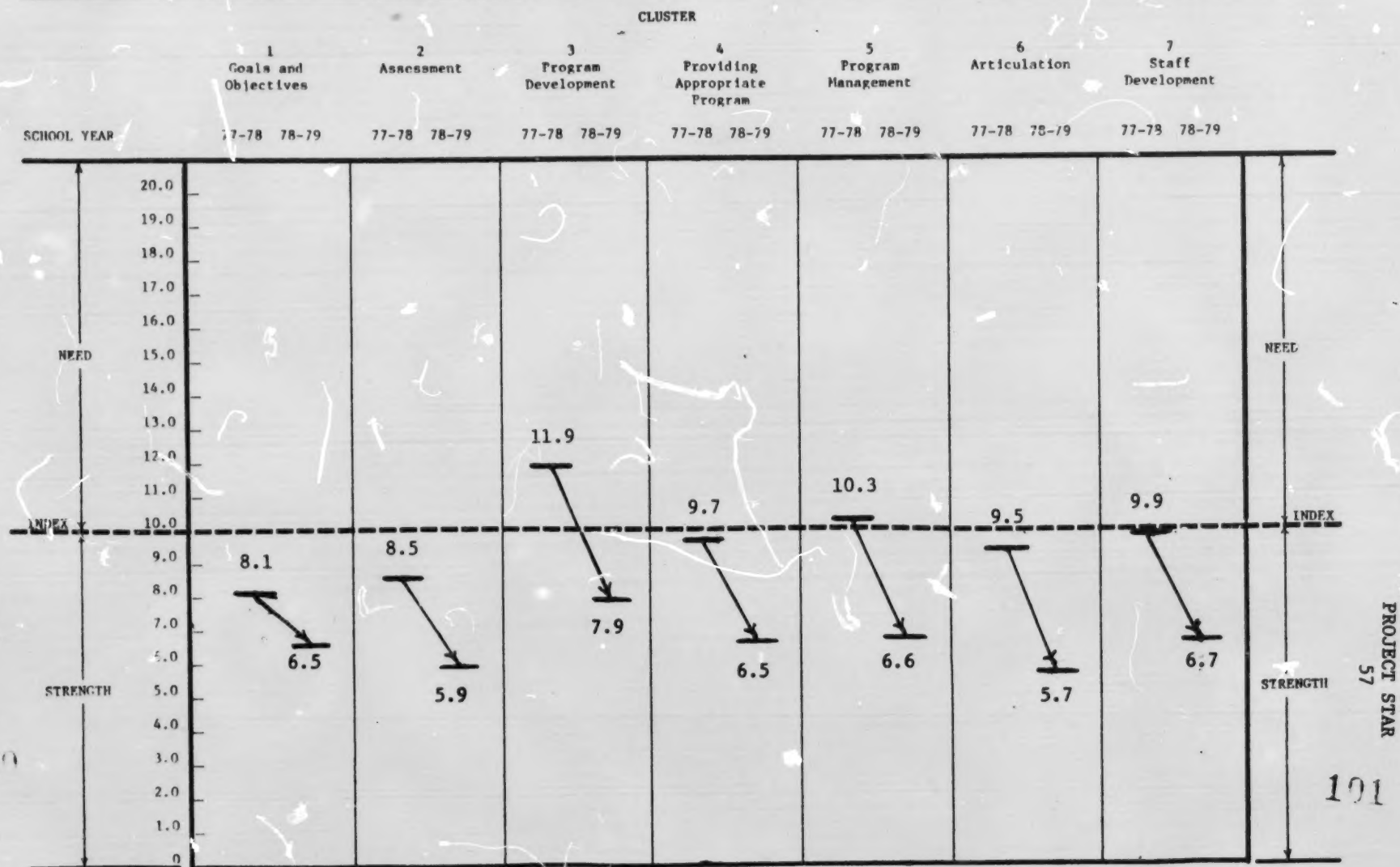
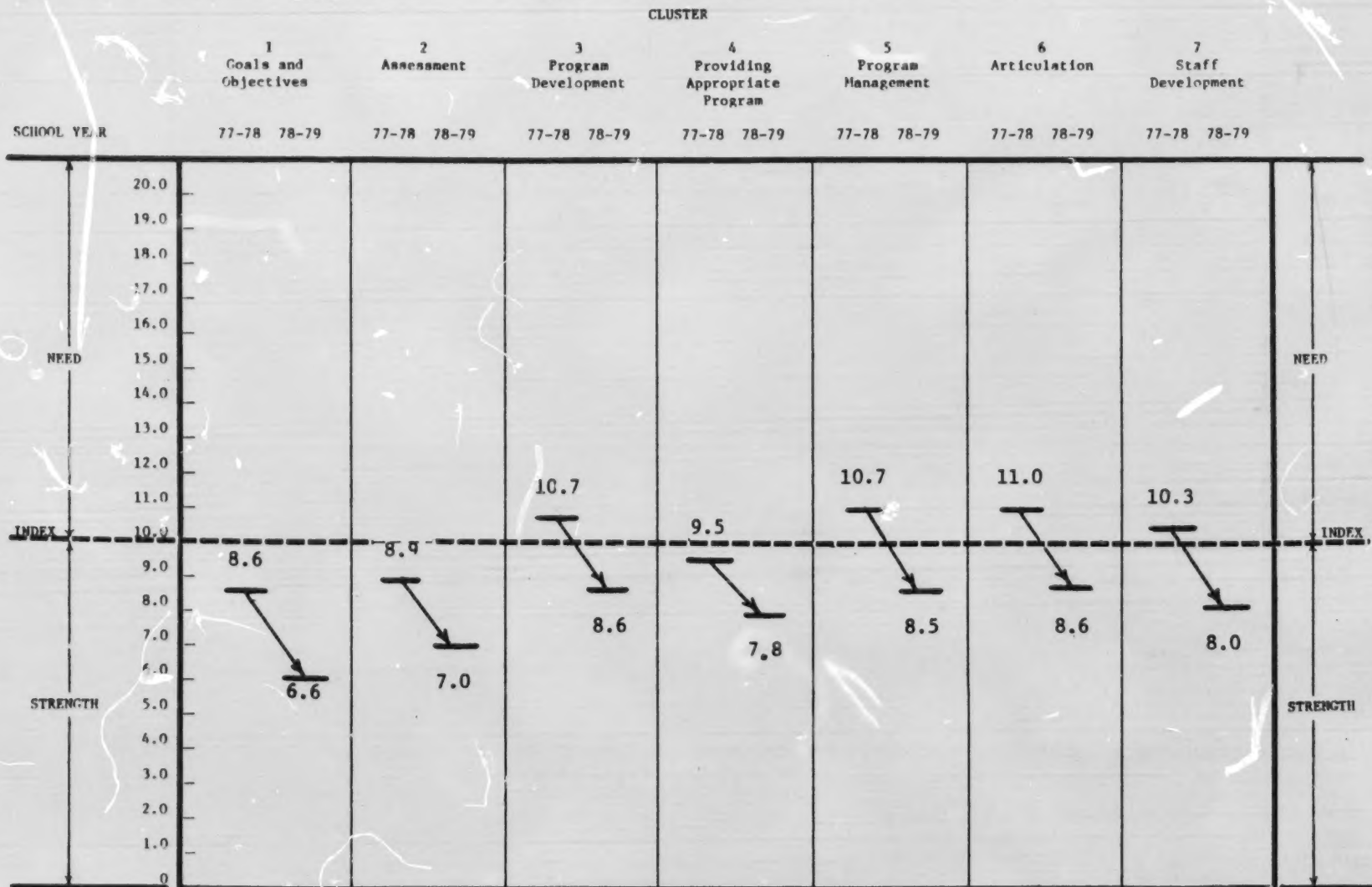


FIGURE 13

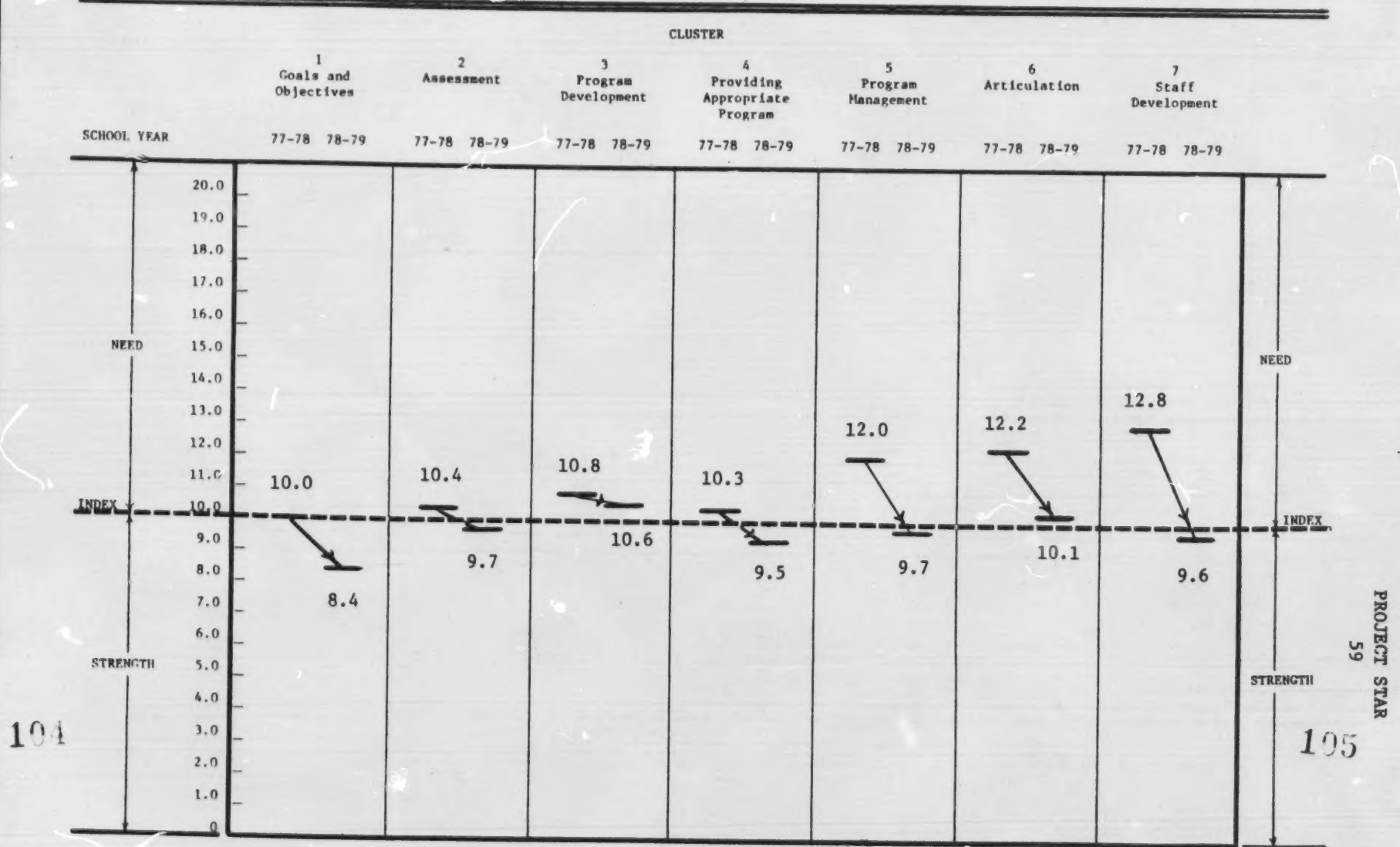
PROJECT STAR: Cluster by Index Trend Analysis - School Years 1977-78 to 1978-79
Schools of Local Education Agency #4



PROJECT STAR
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FIGURE 14

PROJECT STAR: Cluster by Index Trend Analysis - School Years 1977-78 to 1978-79
Schools of Local Education Agency #5



results for Local Education Agency #5 public school staffs. For this local education agency, school staffs (N = 111) in school year 1977-78 observed a need for some formal reading program intervention to occur in all seven Cluster areas. Here, Cluster 7, *Staff Development*; Cluster 6, *Articulation*; and Cluster 5, *Program Management*, were viewed as those areas in most need. These Cluster areas were followed by Cluster 3, *Program Development*; Cluster 2, *Assessment*; Cluster 4, *Providing Appropriate Programs*; and Cluster 1, *Goals and Objectives Implementation*, respectively, for school year 1977-78. A review of the Cluster results for school year 1978-79 shows that school staffs (N = 78) observed their efforts being directed at intervention to the Cluster areas of *Staff Development*, *Program Management*, *Articulation*, and *Goals and Objectives Implementation*. As can be seen, somewhat less emphasis was placed on the Clusters of *Assessment*, *Providing Appropriate Programs*, and *Program Development*.

DISCUSSION

The data from Part Four of this Project suggest the following things related to the staff perceptions on school reading programs questions: (1) Did change occur in the school reading programs? (2) How likely is it that the observed effect was a result of the intervention? (3) Was the effect consistent and observed often enough to have made an impact on the program, participants, and/or materials used? and (4) Was the effect educationally important?

First, data on staff perceptions about the Standards and Program Clusters suggest that school staffs perceived the changes in the school reading programs did occur from school year 1977-78 to 1978-79.

Second, the observed effect on the Standards and Program Clusters (i.e., increases or decreases in the index value) imply that the interventions undertaken by Project STAR were effective in changing the school reading program direction

Third, the effect (changes in the status of a Standard or Program Cluster) were observed often enough to suggest that participants felt

that an impact was being made in their school reading programs.

Four, the results of the staff perception study reflect upon the Project STAR interventions of installing both the Standards and Program Cluster mechanisms into the school settings. The results tend to confirm other results found in this report, especially the Reading Standards Study. Here, information congruence occurs between the information collected on the Standards by the Validation Team and the information collected from school staffs about their reading programs pertaining to the Standards. This observation would suggest that the effect (met Standards and improved Program Cluster areas) on school staffs were educationally important.

PART FIVE

D--THE INSERVICE STAFF DEVELOPMENT STUDY

GOAL STATEMENT

The fourth study of this report concerned inservice staff development efforts aimed at increasing the level of competency and skills of local school personnel--i. e., Project STAR Goal Four.

METHODS

Inservice Staff Development Context

During school years 1977-78 and 1978-79 inservice training workshops were conducted for five participating local education agencies by the State STAR Team and the school-based STAR Resource Teachers (Appendix H). The development and implementation of the inservice workshops was a response to the need to update the content areas in reading instruction while also making process changes in school-based reading programs. Out of this need emerged two types of inservice activities--Content Specific and Process Specific. In the Content (Focus) Specific workshops emphasis was placed on expanding both the skill and knowledge base of participants in order to influence the substance portion of the school's instructional program. This kind of workshop included topics related to language development, reading, project assessment, attitude development, and shared decision making. The Process Specific workshops focused on how to effect and implement change in the school's reading program. This type workshop included such topics as (1) the components of the Process Model; (2) the gaining of commitment to change; (3) communication skills; (4) role and goal clarification in the change process; and (5) the management of reading programs through such strategies as the team approach, time management, and program monitoring. (See Attachment H for more details of these two areas and Volume I of the report for a comprehensive coverage of this delivery system of Project STAR.) These two inservice areas (N = 24)

(i.e., 14 in the Content (Focus) Specific area and 10 in the Process Specific area) became the primary source for evaluation in the inservice staff development activity of Project STAR.

Participants

The audience served by the inservice activities were principals, classroom teachers, LEA contact persons, supervisors, specialists, and senior teachers.

Table 16 provides the number of participants served during school years 1977-78 and 1978-79. Of the total number of participants served (N = 697), 35% were principals. 30% were STAR Resource Teachers, and 18% were classroom teachers. The remaining participants (17%) were respectively specialists, supervisors, LEA contact persons, senior teachers, and Maryland State Department of Education staff.

Instrumentation

Several rating sheets were used by the State STAR Team to monitor the progress of inservice workshops. However, only the Workshop Rating Card, Workshop Rating Card Summary, and the Summary Reporting Sheet for Inservice Activities were used for analytic purposes of this study.

The Workshop Rating Card (Appendix I), a brief form to be completed by the participants at the end of each workshop, requested general information about the workshop attended (title, date, and workshop director) and gave a set of directions for completing four items about the workshop objectives. For each item a Likert Scale containing five possible responses is included. This five-point scale range went from Strongly Disagree through a neutral rating to a Strongly Agree statement.

The Workshop Rating Card Summary (Appendix I') allowed Maryland State Department of Education staff to determine a range, mid-point, and average value for the workshop group as a whole on each of the four items already mentioned on the Workshop Rating Card.

The Summary Reporting Sheet (Appendix I'') form also requested some general information about the inservice activity, i.e., dates, location, and number of participants attending. This form also allowed the Maryland State Department of Education staff to determine the number and

TABLE 16

Number of Participants Requesting Services from Project STAR Inservice Staff
Development Activities by Area (Content, Process, and Other)
School Year 1977-78 and 1978-79

Type of Participants	Inservice Activity Areas			Totals (%)
	Content	Process	Other	
Principals	194	115	28	247 (35%)
Star Resource Teachers	57	137	16	210 (30%)
Classroom Teachers	75	25	23	123 (18%)
Specialists	17	23	11	51 (7%)
Supervisors	11	11	1	23 (3%)
Local Education Agency Person	7	9	3	19 (3%)
Senior Teachers	6	6	4	16 (3%)
Maryland State Department of Education Staff	-	-	8	8 (1%)
TOTALS: (%)	277 (40%)	326 (47%)	94 (13%)	697 (100%)

percent of participants who completed the Workshop Rating Card along with the number and percent for whether the workshop objectives were clearly stated, relevant, supported by the presentation, and accomplished.

RESULTS

Table 17 provides results of the Project STAR Content and Process Specific Inservice Workshops. Columns 1 and 2 identify the Content and Process Workshops and the dates each workshop were held. Columns 3 and 4 list the number and percent of participants attending each workshop and those who responded to the Workshop Rating Cards. Here the total number of participants attending ($N = 561$) differs from those who actually responded ($N = 481$). The difference could be accounted for by (1) participants not showing up for a workshop session, (2) participants electing not to complete the Workshop Rating Card, or (3) participants responding to some questions but not all questions on the Workshop Rating Card. Columns 5 through 8 specify the number and percent of participants who agreed positively to the statements that (1) workshop objectives were clearly stated, (2) workshop objectives are relevant, (3) workshop objectives were supported by the presentations made to participants, and (4) that workshop objectives had been accomplished by the end of the training sessions.

The individual workshop results and the subtotal and total results on the Content and Process Workshop areas were generally high. An examination of the data in columns 5-8 shows that participants responded in a favorable manner to each of the statements mentioned.

DISCUSSION

The data from Part Five concerning Project STAR Inservice Training addresses the following questions: (1) Were inservice training objectives clearly stated? (2) Were inservice training workshop objectives relevant to participant needs? (3) Were inservice training objectives supported by the presentations given at the workshop? and (4) Were inservice training objectives accomplished? For question one,

TABLE 17
Project STAR Inservice Training

1	2	3	4	5	6	7	8
AREA	DATE	NUMBERS ATTENDING NO. %	NUMBER OF RESPONSES NO. %	OBJECTIVES CLEARLY STATED NO. %	OBJECTIVES ARE RELEVANT NO. %	OBJECTIVES SUPPORTED BY PRESENTATION NO. %	OBJECTIVES ACCOMPLISHED NO. %
I. Content (Focus)							
A. Inservice	071078	29 100	29 100	29 100	29 100	29 100	29 100
B. Reading	100378	8 100	8 100	8 100	8 100	8 100	7 87
C. Reading	101078	10 100	10 100	8 80	9 90	8 80	10 100
D. Reading	101378	40 100	40 100	40 100	40 100	40 100	29 97
E. Follow-up	112878	24 100	24 100	24 100	24 100	24 100	24 100
F. Principals	120678	13 100	13 100	13 100	11 85	13 100	13 100
G. Principals	121478	23 100	11 48	11 100	10 91	11 100	11 100
H. Reading	010479	11 100	11 100	11 100	11 100	11 100	11 100
I. Reading	011079	16 100	16 100	16 100	14 87	15 94	14 87
J. Reading	012579	20 100	20 100	20 100	18 90	20 100	19 95
K. Reading	032279	48 100	48 100	48 100	48 100	48 100	48 100
L. Answer	040679	94 100	52 55	52 100	51 98	50 96	50 96
M. Principals	051479	5 100	5 100	5 100	5 100	4 75	5 100
N. Principals	052179	22 100	19 86	19 100	18 95	18 95	18 95
Subtotal		363 100%	306 92%	304 99%	296 95%	299 96%	288 97%
II. Process							
A. Change Agent	090778	15 100	15 100	12 80	12 80	12 80	11 73
B. STAR Meet	092078	23 100	21 91	21 100	21 100	21 100	21 100
C. STAR Meet	092778	30 100	30 100	29 96	29 96	29 96	28 93
D. STAR Proc.	102578	24 100	13 54	13 100	13 100	13 100	13 100
E. STAR Proc.	110178	35 100	35 100	34 97	33 94	34 97	35 100
F. STAR SRT. Ins.	120678	16 100	16 100	16 100	15 94	16 100	16 100
G. STAR Per. Sur.	051479	12 100	12 100	12 100	12 100	12 100	12 100
H. STAR Eval.	051479	7 100	7 100	7 100	6 86	7 100	7 100
I. STAR Per.sur.	052179	25 100	17 68	17 100	15 88	17 100	17 100
J. STAR Eval.	052179	11 100	9 82	9 100	6 67	8 89	9 100
Subtotal		198 100%	175 90%	170 97%	162 91%	169 96%	169 97%
Total		561 100%	481 91%	474 98%	458 93%	468 96%	457 97%

participants in both the Content and Process areas responded in the affirmative. Similarly, participant responses to questions 2, 3, and 4 were also affirmative. These results would suggest that those activities conducted at the workshop were on target with the stated objectives, were relevant to what participants were doing in their reading programs, were supported by presentations made by workshop trainers and that workshop objectives were accomplished.

PART SIX SUMMARY

Volume Two of the Final Report on Project STAR focused on Goal 1 to both improve the performance organization and administration of elementary school reading programs and Goal 4 to develop competence to improve reading program content and management. (See Volume I for reports on Goals 2 and 3.) These goals were selected for evaluative purposes since they could be quantitatively measured as part of Project STAR's overall mission to improve the reading program in ten schools which were reported lowest in the Maryland Accountability Program (MAP).

EVALUATION PROBLEM

The general evaluation problem addressed was to determine the impact of Project STAR intervention on public schools' reading programs. The specific problems to resolve were (see Figure 15) (A) What impact did the intervention have on the reading achievement scores of third and fifth grade students in participating schools? (B) What impact did the intervention have on schools meeting the Standards for Successful Reading Programs and the Program Clusters? (C) What impact did the intervention have on the perceptions of school staff reading program personnel? (D) Did Project STAR meet its objectives related to inservice staff development activities designed for participating school members?

EVALUATION DESIGN

In general, the overall evaluation design used was the Instructional Program Partition, Evaluation, and Report system. From this general design three specific evaluation designs were generated for the major subsystems used in Project STAR. The Reading Achievement Study was both summative and ex post facto in its reporting nature and a longitudinal

FIGURE 15 - Project STAR Evaluation Questions and Responses For Educational Decision Makers

GOAL: To improve performance, organization, and administration of elementary school reading program.	Question #1: Did change occur?	Question #2: How likely is it that the observed effect was the result of the Project STAR intervention?	Question #3: Was the effect consistent and observed often enough to have made an impact on reading programs, in schools, and on participants?	Question #4: Did the effect have educational importance?
A. Reading Achievement Study: Student Academic Performance Evaluation Study #1 Part Two of this report.	Yes. Six Year Longitudinal Analysis: For School Years 1973-74 to 1978-79 (N = 8). For third grade students, a small but noticeable change (increase) in the average G.E. scores occurred. Average G.E. scores (baseline data) for all schools considered were somewhat further away from the State average G.E. prior to the onset of Project STAR than when the intervention was operational. For fifth grade students, also a small but noticeable change occurred.	Uncertain. It is difficult to say that the performance change after the intervention (Project STAR) was due primarily to the treatment (Project STAR Process) or to some other intervention also operating in the schools. Also the sample size (N = 8) of schools is too small for any generalization to be made to the larger population of schools operating in Maryland.	Yes. The effect was observed often enough. Yes. The effect was consistent enough to say that the intervention had some impact on student performance. However, the degree of impact is unknown.	Yes. The implications drawn from the data might include: (1) the Project STAR intervention affected student performance indirectly, (2) the Project STAR benefited to some unknown degree the student performance in these schools.
	Yes. Three-Year Longitudinal Analysis: For School Years 1975-76 to 1977-78. (N = 8). For third and fifth grade students, an upward trend in G.E. scores for these schools to the State G.E. average for Reading Comprehension was noticed. This change in the G.E. scores lead to the six year longitudinal analysis mentioned above.			
	Yes. Same School/Student Body Comparison. School Years 1975-76 to 1977-78 (N = 8). Third grade student G.E. scores from schools participating in Project STAR when compared to these same student G.E. scores in the fifth grade showed little change--essentially remaining stable.			
	Yes. Second Year School Results For School Year 1976-77 (N = 26). Of the 51 school grades considered, the following changes occurred: For third grades, (N = 26), 69% (18 schools) showed an upward trend toward State average, 4% (1 school) remained stable, and 27% (7 schools) declined. For fifth grades, (N = 25), 60% (15 schools) showed an upward trend while 12% (3 schools) remained stable, and 28% (7 schools) declined. In general, of the total number of grades considered, 65% (33 schools) showed an upward trend, while 8% (4 schools) remained stable and 27% (14 schools) declined.			

* (N = Number of Schools)

FIGURE 15 (Cont'd.) - Project STAR Evaluation Questions and Responses For Educational Decision Makers

GOAL: To improve performance, organization, and administration of elementary school reading programs.	Question #1: Did change occur?	Question #2: How likely is it that the observed effect was the result of the Project STAR intervention?	Question #3: Was the effect consistent and observed often enough to have made an impact on reading programs, in schools, and on participants?	Question #4: Did the effect have educational importance?
B. Standards (organization, and administration) Evaluation Study #2 Part Three of this report.	Yes. Validation and Revalidation Processes used on the determination of whether or not a standard has been met, suggest that change did occur from onset of Project STAR to its completion. Here, many of the standards were verified to have progressed from a state of not or partially being met, to a status of being completely met or almost met.	Quite Probable. The observed effect--a met standard--are closely tied to the interventions installed by the Project STAR Team and individual school staffs. For example, (1) installation of the standards as a guide to bring about reading program change; (2) the development and implementation of Project STAR Action Plans, and (3) the establishment and maintenance of a validation and revalidation monitoring system.	Yes. The effect-verification of a standard being met--was completed for each school twice during the maintenance phase of Project STAR. Also, validation of standards, indicators and program clusters suggest that impact was made in the school reading programs administration and organization aspects.	Yes. Staff responses to and actions taken indicate that the effect was educationally important.
C. Teacher/Staff perception study of reading standards and program clusters (organization and administration) Evaluation Study #3 Part Four of this report.	Yes. Staff perceptions about both the reading standards and program clusters suggest, by the pattern of trend shown that change did occur over the two year period from school year 1977-78 to 1978-79.	Quite Probable. The observed effect--changes in the Index value i.e. need to a strength or strength to a refined strength--indicate that school staffs saw progress being made in both the reading standards area and reading program cluster areas.	Yes. Staff perceptions on both standards and clusters was collected at two points in time. The information gained was adequate enough to suggest that school staff saw the Project STAR intervention as having made an impact on school reading programs.	Yes. Staff perceptions on data on both the standards and reading clusters suggest that the interventions undertaken by Project STAR were educationally important to school staffs. This observation is confirmed by the results found in the reading standard study.

FIGURE 15 (Cont'd.) - Project STAR Evaluation Questions and Responses For Educational Decision Makers

GOAL: To develop needed inservice staff development activities in order to improve reading programs.	Question #1: Were inservice training workshop objectives clearly stated?	Question #2: Were inservice training workshop objectives relevant to participants needs?	Question #3: Were inservice training objectives supported by the presentation given at the workshop?	Question #4: Were inservice training objectives accomplished?
A. Inservice Staff Development Study #4 Part Five of this report.				
A.1. Content (Focus) Workshops (N = 14)	Yes. In thirteen (99%) of the fourteen (100%) Content workshops, participants maintained that each workshop(s) had clearly stated objectives.	Yes. The variety of professionals attending these workshops appeared to matter little, an average of 95% of the participants maintained that the workshop objectives were relevant to their needs.	Yes. On the average, 96% of those responding to this question felt that the performance given by workshop presenters supported the objectives.	Yes. On the average 97% of participants indicated that inservice training workshop objectives were accomplished.
A.2. Process Workshops (N = 10)	Yes. On the average, 97% of the participants indicated that each Process workshop(s) had clearly stated objectives	Yes. Here, an average of 91% of the participants indicated that the inservice workshop objectives were relevant to their own needs.	Yes. On the average 96% of those who responded on this item stated that the performance given by workshop presenters were tied to stated inservice workshop objectives.	Yes. Here, also on the average 97% of the participants involved in the process workshop indicated that workshop objectives were accomplished.
Total (N = 24)				

time series (Campbell and Stanely, 1966) design covering a six-year period from school year: 1973-74 to 1978-79. Both the Reading Standard Study and the Staff Perception Study were formative and summative in reporting nature and are referred to as a One-Group Pre-test Post-test Design. The Inservice Staff Development Study was formative and summative in its reporting nature and by design is identified as a One Shot Case Study.

SUBJECTS

The subjects chosen for these studies included third and fifth grade students, principals, STAR resource teachers, classroom leaders, specialists, local education agency personnel, and senior teachers. The subjects were from the 36 schools in the five local education agencies that participated in Project STAR. The size and nature of the populations varied from school to school and from school year to school year.

INSTRUMENTATION

Several instruments were used in these studies. From the Maryland Accountability Program, the Iowa Tests of Basic Skills Reading Comprehension Subtest was used in the Reading Achievement Study. With the Standards for Successful Reading Programs Study, several instruments were used in the Project STAR Documentation Process which included an Indicator's Document, an Indicators' Analysis Document, and the Staff Perception document. In the Staff Perception Study a self-report Questionnaire was used to determine staff views about Reading Standards and Program Clusters. For the Inservice Staff Development Study three short form instruments were used--a Workshop Rating Card, a Workshop Rating Card Summary, and a Summary Reporting Sheet.

DATA SOURCES

The primary sources of data consisted of (1) grade equivalent scores from the reading comprehension subtest of the Iowa Tests of Basic Skills; (2) numbers and percentages of schools meeting the Standards

for Successful Reading Programs; (3) Weight, Rating and Index values of school staff perceptions on the Reading Standards and Program Clusters; and (4) numbers and percentages from the rating sheets on Project STAR Inservice Training concerning accomplished objectives.

FINDINGS

The major findings were discussed for each of the studies related to the Project STAR Goals already identified. Figure 15 summarizes the findings for each study covered in this report according to several key questions that decision makers want to know about program/project intervention implemented at the local school system level in Maryland.

In general, Project STAR, as a state-sponsored reading program intervention, directly affected school reading programs and personnel and somewhat indirectly influenced the reading achievement of pupils in the third and fifth grades.

RECOMMENDATIONS

On the basis of the information generated in this Final Report on Project STAR the following recommendations are made:

Program Evaluation Model

- . That the Instructional Partition, Evaluation, and Report System be applied to other ongoing instructional programs sponsored by the Department.

Reading Achievement Study

- . That follow-up study be conducted over the next two years of the schools that participated in Project STAR. This should be done in order to determine if the removal of the Project STAR intervention will have an effect on the Reading Comprehension Grade Equivalent scores of third and fifth grade students in these schools.

Reading Standards Study

- . That the Standards for Successful Reading Programs and the Reading Program Clusters containing the Standards continue

to be used as: (1) a guide for reading programs in the state, (2) a framework for identifying program needs, and (3) a structure for managing reading programs. The Standards for Successful Reading Programs and the Reading Program Clusters should be periodically reviewed and when necessary modified to meet changes that occur in reading program structures and content.

- . That the Documentation Process developed and utilized in Project STAR be tailored and applied to other educational interventions undertaken by the Maryland State Department of Education. This mechanism provides a useful method for determining program needs and the validation of progress made toward overcoming the needs.

Staff Perception Study

- . That the Staff Perception questionnaire framework and analysis procedures be tailored to other instructional curriculum areas. The instrument and procedures can act as a catalyst to users for determining what areas of their reading program need to be strengthened.

Inservice Staff Development Study

- . That Inservice Staff Development Workshops, where appropriate, include not only the assessment of attitudes about the content and presentations aspects of the workshop but also include the assessment of cognitive or performance competencies of participants at the beginning and the completion of the workshop.

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APPENDIXES

APPENDIX A
STANDARDS FOR SUCCESSFUL READING PROGRAMS

STANDARD ID NO.	STANDARD
1	Each school should have a formally written point-of-view which is consistent with those of the state and the local school system.
2	School building reading objectives must be developed for instructional programs from the adopted state and school system accountability goals in reading.
3	The reading goals and objectives must be disseminated to the school staff, students, parents, and community.
4*	Each school staff should identify groups of students with similar instructional needs where applicable.
5	Each school staff should select from its school building accountability objectives in reading those which are appropriate for each identified group of students with similar instructional needs in the school.
6	Each staff member (administrator, reading specialist, reading teacher, and classroom teacher) must be certified to teach reading according to the Maryland state certification standards.
7	The school staff should utilize a team approach (school and/or system specialists) to coordinate the total reading program and to address students' reading problems.
8	The school staff (administrators, specialists, teachers) should participate in ongoing reading inservice programs.
9	The school staff should make use of available supportive services for reading leadership purposes: reading teachers, specialists, supervisors; consultants, and personnel from teacher-training institutions.
10	The school staff should utilize for enrichment community resources such as parents, college students, retired citizens, and business and industry personnel.
11	The school administrator should be responsible for the articulation and coordination of the school reading program. The administrator may receive assistance from a staff member who has special training in reading.

* - Those Standards Considered Critical to Successful Reading Programs

APPENDIX A STANDARDS FOR SUCCESSFUL READING PROGRAMS (Cont'd.)

STANDARD ID NO.	STANDARD
12	The school administrator should provide time to insure the achievement of the reading program objectives within the instructional schedule.
13	The school staff should determine the organizational patterns in the total school environment based upon the instructional needs of the student population as defined in Standard 4.
14	The school staff should maintain a recordkeeping system to provide data for the following: a. Specific evidence of student progress b. Information for reporting progress to students and parents c. Input for evaluating the school's organizational structure and curriculum.
15	The school should conduct an ongoing outreach program for parents and the community to provide information about the reading program.
16*	The school staff should develop an appropriate instructional program to achieve the specific objectives for groups of students defined in Standard 4.
17	Teachers should emphasize reading in the content areas (K-12) by utilizing: a. Content materials (fiction and non-fiction) in the teaching of reading b. Techniques to facilitate the reading of materials in the various disciplines
18	The school staff should utilize the services of the media center as an integral part of each student's reading program.
19	The school staff should design and implement instructional activities to foster a positive attitude towards reading.
20	The school staff should inventory and categorize reading materials and equipment in the school according to the selected school building reading objectives appropriate to the groups of students having similar needs defined in Standard 4.
21	The school staff should select and evaluate new materials appropriate for each school building reading objective, using local school system procedures.

* - Those Standards Considered Critical to Successful Reading Programs

APPENDIX A STANDARDS FOR SUCCESSFUL READING PROGRAMS (Cont'd.)

Standard ID NO.	STANDARD
22	The school staff should receive instruction in the purposes and appropriate use of all school reading materials and equipment.
23	The school staff should select materials in various disciplines (K-12) for variety and appropriateness to the instructional reading level of the students.
24	The physical arrangement of the school building should facilitate the implementation of the reading program by providing appropriate areas.
25*	Student achievement scores for the school population should be equal to or above the declared expected school reading achievement level as defined by the Maryland accountability formula and grade levels.
26	Students should achieve a basic literacy level (state reading goal 4) at grades 7 and 11 as defined by the Maryland Accountability Program (Maryland Basic Skills Mastery Tests).
27*	School staffs should use the results from informal diagnostic and achievement devices as a basis for making necessary changes in instructional activities for individual students.
28	Schools must disseminate achievement results to the school community

* - Those Standards Considered Critical to Successful Reading Programs

EVALUATION PROFILE

PRINCIPAL: Project STAR - Program Assessment -

APP REFERENCE: # School Year
1978-1979

OBJECTIVE: _____

1.0 IF AN EVALUATION WAS CARRIED OUT, WHAT QUESTION(S) DO YOU WANT ANSWERED?

1. Did change occur-(reading Comprehension, teacher staff perception's, standards, inservice, clusters).
2. Was the effort educationally important?
3. Can the intervention be implemented in another location?

2.0 WHAT SOURCES OF INFORMATION DO YOU HAVE RELATED TO THIS QUESTION?

Project STAR Director, planners, developers, STAR Resource teachers, principals

3.0 WHAT WORK HAVE YOU PREVIOUSLY COMPLETED WHICH MIGHT RELATE TO THIS QUESTION?

- . Project STAR Handbook
- . Standards For Successful Reading Program
- . Project STAR and Documentation Forms
- . School Case History

4.0 DECISION(S) - JUDGEMENTS TO BE MADE FROM THE EVALUATION

. Inservice Training Records

4.1 DECISIONS

COMMENTS

4.2 JUDGEMENTS

COMMENTS

4.1.1 Who or what will be affected by the results of this evaluation?

- X (1) Persons: (who) SRT, Principal,
- X (2) Programs: (what) Reading
- (3) Product(s) (what) _____

4.1.2 What kind of action do you anticipate will be required based on the results of the evaluation?

- (1) Implement in other LEAs and schools
- (2) _____
- (3) _____
- (4) _____

4.1.3 When will this need to be completed?

- (1) What date: Aug. - Sept. 1979

4.2.1 Are you trying to:

- X (1) Determine what currently exists and/or
- X (2) Predict future performance or situations.

4.2.2 When will data be collected?

- (1) Initial observations (planning)
- X (2) Formative observations (monitoring)
- X (3) Summative observations

4.2.3 What type of reference will be used?

- X (1) Self reference (performance compared to the program itself)
- X (2) Norm reference (groups of similar individuals)
- n/a (3) Criterion reference (performance against a standard)

Throughout Project

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Prepared By: S. P. Holowenzak

APPENDIX B

PROJECT STAR
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DECISION(S) - JUDGMENTS TO BE MADE FROM THE EVALUATION

4.1 DECISIONS	COMMENTS	4.2 JUDGMENTS	COMMENTS
4.1.4 What is the purpose of the decision to be made based on this evaluation? <u>X</u> (1) Administrative (explain): _____ _____ <u>X</u> (2) Instructional (explain): _____ _____ n/a (3) Counseling (explain): _____ _____ n/a (4) Research (explain): _____ _____ ____ (5) Other (explain): <u>n/a</u> _____			
4.1.5 What commitments can you provide to support this evaluation? <u>X</u>(1) Personnel \$ _____ FTE \$ _____ Who: <u>Leroy London, Vera Hall</u> <u>Larry Nash, Sandra Crowley</u> <u>JoAnne Carter - other on request.</u> _____ <u>X</u> (2) Materials/Supplies <u>\$n/a</u> <u>X</u> (3) Funding Source <u>\$n/a</u> Federal <u>\$</u> State <u>\$</u>			

Prepared By: S. P. Holowenzak

DECISION(S) - JUDGEMENTS TO BE MADE FROM THE EVALUATION

4.1 DECISIONS	COMMENTS	4.2 JUDGEMENTS	COMMENTS
4.1.6 How important are the evaluation based decisions? <u>X</u> (1) Can the decisions be reversed? Yes _____ No _____ <u>X</u> (2) Estimate how long will the effect last: Mo(s). _____ Yr(s). <u>1976-79</u> <u>X</u> (3) How important are the learning outcomes? HIGH ☒ 1 2 3 4 5 LOW			

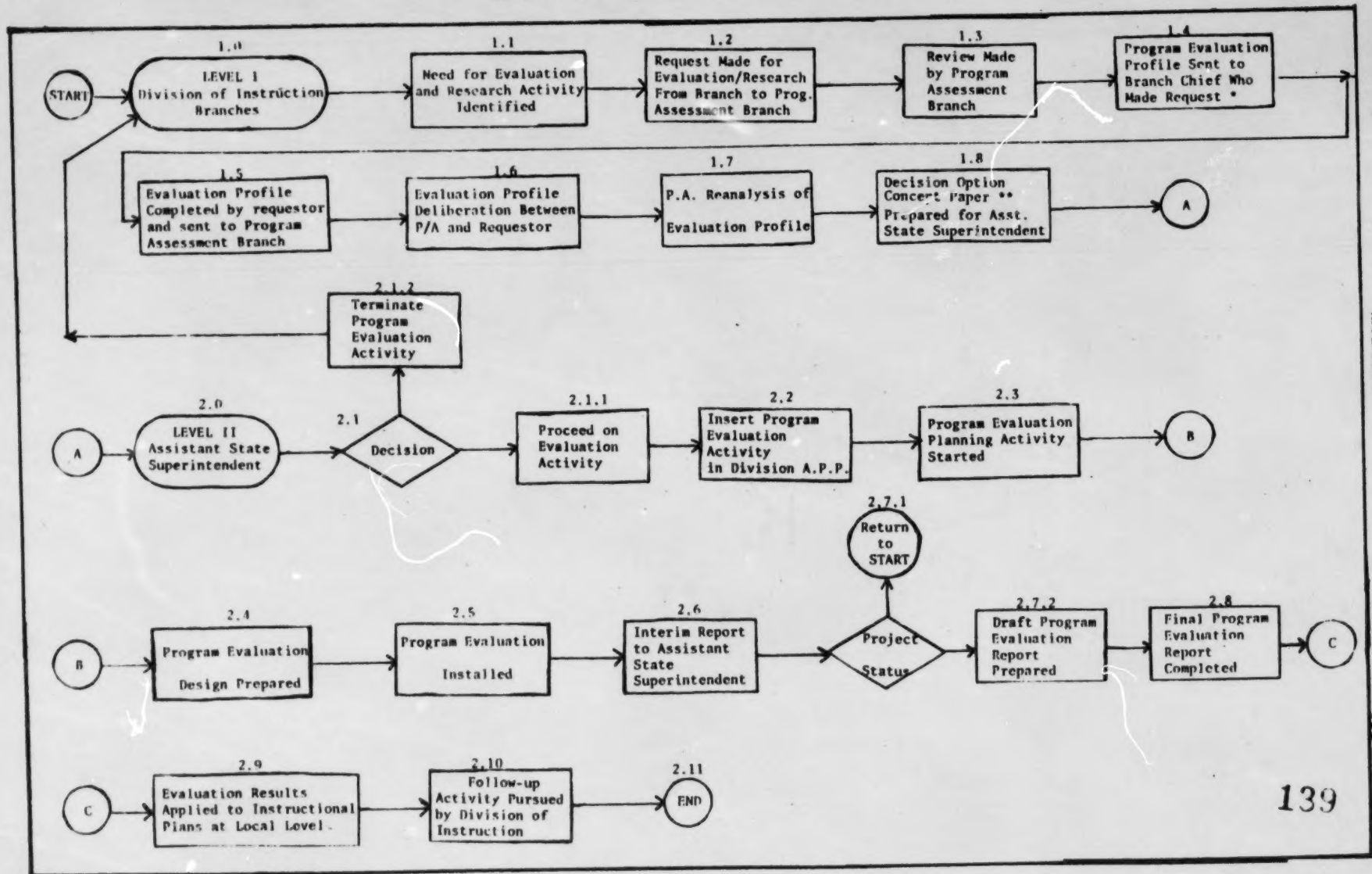
5.0 WHAT IS THE PURPOSE OF THIS EVALUATION

5.1 QUESTION ORIENTATION	Yes	No	Uncertain	COMMENTS	Yes	No	Uncertain	COMMENTS
5.1.1 To relate outcomes to objectives.	☒	0	0		5.2.1 To determine whether institutions, programs, and personnel should be approved to perform specified functions.	0	☒	
5.1.2 To provide an accurate accounting of results.	☒	0	0		5.2.2 To identify and assess the potential costs and benefits of competing policies for a given institution.	☒	0	0
5.1.3 To determine the cause and effect relationships.	0	0	☒		5.2.3 To provide a knowledge and value base for making and defending decisions.	☒	0	0
5.1.4 To continuously supply the information needed to fund, direct and control programs.	☒	0	0		5.2.4 To judge the relative merits of alternative educational goods and services.	☒	0	0

The Evaluation PlanSpecific Components

PROGRAM OBJECTIVES	What objective is being evaluated? What is the goal or need statements to which this objective relates? Is this objective written in such a form that it can be measured? Is the implied measure appropriate for the objective?
EVALUATION DESIGN	What questions must this design address? What information must this design be able to produce in order to answer these questions? To what purposes of evaluation do these questions relate? What information will the audience accept as evidence related to the purpose of the evaluation?
ASSESSMENT INSTRUMENTS	What kinds of assessment instruments will be most appropriate to secure the information required in the design? (Norm or criterion referenced tests - questionnaires - interviews - observations - rating scales - log sheets - narrative reports)
ADMINISTRATION DATES AND PERSONNEL	During what month or months should assessment take place? Who would be the most appropriate person to collect the data? Who is responsible for assigning personnel and dates?
DATA-ANALYSIS TECHNIQUES	What kinds of scores will be most useful in providing the information needed, as identified in the purpose and in the design? What kinds of data analysis will be most appropriate? Will outside help be required to do the required analysis?
MONITORING PROGRAM ACTIVITIES	What activities are central to the accomplishing of the objectives? What information must be collected to accomplish the purposes of the evaluation?
MONITORING DATES AND PERSONNEL	Who will perform the monitoring function? How frequently must the activities for this objective be monitored? To whom should the monitoring be reported?
KEY REPORTING DATES	Who will be interviewed to ensure that reporting dates meet decision or user requirements? Who will establish reporting deadlines?
WHO IS TO RECEIVE THE REPORT(S)	What different audiences will receive evaluation reports on this objective? Have the questions identified by the audiences during the initial design step been addressed in the evaluation report? Have the purposes of the evaluation been accomplished?
DETERMINING HOW THE DATA REPORTS WILL BE USED	What activities have been planned to ensure the most effective use of the evaluation reports?

Project STAR Management Plan



APPENDIX E.

STAR PROJECT DOCUMENTATION FORM

CLUSTER: I. Goals & Objectives

To develop and articulate to staff, students, parents and community an instructional point-of-view and objectives based on state and local education system philosophy, goals, and objectives.

School _____

Validating Person/s _____

Date Evaluated _____ Date Met _____

STANDARD & INDICATORS	LOCATION	SUGGESTIONS FOR ACTION PLANS
1. Each school should have a formally written point-of-view which is consistent with those of the state and the local school system. INDICATORS INCLUDE: _____ 1.1 Written school point-of-view _____ 1.2 Written school system point-of-view _____ 1.3 School's point-of-view includes school system point-of-view _____ 1.4 School's point-of-view includes state point-of-view _____ 1.5 School's point-of-view includes school point-of-view developed with input from: staff, parents, and/or consultants ADDITIONAL INDICATORS INCLUDE:		

APPENDIX F

PROJECT STAR
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No. of Times You Completed
This Form (Please Check Below)

School: _____

Date: _____

1 _____

2 _____

PROJECT STAR

Documentation - Part C

Part 1

Importance

Appraisal

LEFT: On the left of each item, write the rating indicating each statement's importance to you.

- 1 = no value
- 2 = of little value
- 3 = indifferent
- 4 = somewhat vital
- 5 = vital

RIGHT: On the right of each item, write the rating indicating your appraisal of the status of how each statement functions in your school's reading program.

- 1 = completely disagrees
- 2 = slightly disagrees
- 3 = don't know
- 4 = slightly agree
- 5 = strongly agree

RESPONSE

STATEMENT

RESPONSE

- | | | |
|-------|--|-------|
| _____ | 1. The school has a written point-of-view (philosophy) about reading. | _____ |
| _____ | 2. The school's reading point-of-view reflects the local school system's point-of-view. | _____ |
| _____ | 3. The school's accountability reading objectives are written. | _____ |
| _____ | 4. The school's accountability reading objectives are derived from the local school system's goals. | _____ |
| _____ | 5. The school's accountability objectives include Maryland State Department of Education reading goals and objectives. | _____ |
| _____ | 6. The staff understands the school's reading goals and objectives. | _____ |
| _____ | 7. Individual students can state the purpose of a reading activity. | _____ |
| _____ | 8. Formal and informal tests used in the school are administered in a diagnostic sequence. | _____ |
| _____ | 9. Assessment data is used to plan instruction. | _____ |
| _____ | 10. Recordkeeping procedures are used to chart student growth. | _____ |
| _____ | 11. The school's recordkeeping procedures reflect a school-wide attempt to coordinate individual, class, and total school records. | _____ |
| _____ | 12. Recorded information is used to make school-wide program decisions (for example, to select new materials). | _____ |
| _____ | 13. Test results are disseminated to inform the staff of program areas needing emphasis. | _____ |

RESPONSE

STATEMENT

RESPONSE

- | | | |
|-------|---|-------|
| _____ | 14. The staff is informed whether or not students meet the basic literacy requirements as tested in the Maryland Basic Skills Mastery Test (functional reading). | _____ |
| _____ | 15. The staff is informed whether or not students meet expected reading achievement levels as measured by the accountability testing program (Iowa Tests of Basic Skills and the Cognitive Abilities Test). | _____ |
| _____ | 16. The staff has designed activities for functional reading skills. | _____ |
| _____ | 17. The school's accountability objectives include functional reading objectives. | _____ |
| _____ | 18. The school staff uses a written plan to assist students in meeting basic literacy requirements and expected reading achievement levels. | _____ |
| _____ | 19. Specific school system criteria are used to select new materials. | _____ |
| _____ | 20. Specific school criteria are used to select new materials. | _____ |
| _____ | 21. The school staff is involved in the selection of instructional materials. | _____ |
| _____ | 22. The school staff sets priorities in selecting materials. | _____ |
| _____ | 23. Materials selected for instruction provide adequate coverage of the accountability goals and objectives. | _____ |
| _____ | 24. The materials inventory is useful when planning instruction. | _____ |
| _____ | 25. The staff is provided training in the appropriate use of materials and equipment. | _____ |
| _____ | 26. The staff is informed of materials available for review and use from the school system or community resources. | _____ |
| _____ | 27. Students are allowed to use audiovisual equipment. | _____ |
| _____ | 28. Students are taught how to read textbooks in all content areas as a part of the reading program. | _____ |
| _____ | 29. Lessons in the content areas include learning experiences in print, non-print, fiction, and non-fiction. | _____ |
| _____ | 30. Staff has received inservice on using a variety of methods to teach reading in the content areas. | _____ |
| _____ | 31. The media center program is an integral part of the reading program. | _____ |
| _____ | 32. Community resources available for school use have been identified. | _____ |
| _____ | 33. Parents are supportive of the reading program. | _____ |
| _____ | 34. Parents participate in the reading program as volunteers. | _____ |

No. of Times You Completed
This Form (Please Check Below)

School: _____

Date: _____

1 _____

2 _____

PROJECT STAR

Documentation - Part C

Part 2

LEFT: On the left of each item, write the rating indicating each statement's importance to you.

- 1 = no value
- 2 = of little value
- 3 = indifferent
- 4 = somewhat
- 5 = vital

RIGHT: On the right of each item, write the rating indicating your appraisal of the status of how each statement functions in your school's reading program.

- 1 = completely disagree
- 2 = slightly disagree
- 3 = don't know
- 4 = slightly agree
- 5 = strongly agree

RESPONSESTATEMENTRESPONSE

- | | | |
|-------|--|-------|
| _____ | 35. School population groups are identified according to established criteria. | _____ |
| _____ | 36. School instructional groups are formed using assessment data. | _____ |
| _____ | 37. School instructional groups are formed using teacher judgment. | _____ |
| _____ | 38. Written procedures exist for referring students who need diagnostic services and/or special services. | _____ |
| _____ | 39. Staff members know who is responsible for providing continuous reading instruction for each student. | _____ |
| _____ | 40. A written plan for achieving school-wide or classroom accountability objectives exists. | _____ |
| _____ | 41. The staff has received inservice in ways to match students' assessed needs to the school accountability objectives used in planning lessons. | _____ |
| _____ | 42. Instructional activities are planned to achieve specific school building objectives. | _____ |
| _____ | 43. Different instructional methods and materials are used for students within identified population groups. | _____ |
| _____ | 44. Students are placed in content area materials appropriate to their reading levels. | _____ |
| _____ | 45. Students select materials appropriate to their reading levels. | _____ |
| _____ | 46. Students exhibit a positive attitude toward reading. | _____ |
| _____ | 47. Students select reading as a personal activity. | _____ |
| _____ | 48. Activities designed to develop positive attitudes toward reading are provided. | _____ |

RESPONSESTATEMENT90- PROJECT STAR
RESPONSE 90

49. Staff roles and responsibilities in the reading program are clearly defined.
50. A team of staff members coordinates the total reading program.
51. A team of staff members (for example: the screening committee; the admissions, review, and dismissal committee; educational management team) coordinates programs for small groups and individual students.
52. All school-based specialists participate in the school's reading program.
53. Available system-based personnel and services are used to support the school's reading program.
54. Sufficient time is devoted to achieving the reading goals and objectives of the school, the school system, and the State of Maryland.
55. The direct instructional time allotted for each instructional group is usually uninterrupted.
56. The staff provides input into decisions about the school's organizational structure.
57. The organizational pattern in the school meets most students' instructional needs.
58. Appropriate space, materials, and equipment are available in the classrooms for each group of students.
59. Appropriate space, materials, and equipment are available in the media center.
60. Each classroom reading program is part of a planned sequence from grade to grade within the school.
61. The information contained in the staff handbook is sufficient to enable staff members to implement the total school reading program.
62. The principal coordinates the reading program.
63. Information about the reading program is shared with parents.
64. Inservice topics are mutually determined by administrative, supervisory, and teaching staff.
65. School staff competencies are used to plan and provide inservice.
66. Ideas from inservice sessions are implemented in the classroom.
67. Inservice sessions are evaluated by the participants.
68. Certified teachers require additional inservice to remain qualified for their positions.

PROJECT STAR - FORTRAN PROGRAM - TEACHER QUESTIONNAIRE

FORTRAN STATEMENT

```

00101 1*      DIMENSION IR(68),IX(42,68,2),N(42,2),IB(6),IE(6),F(42,68,3),
00101 2*      + 11(7),12(7),13(28),14(28),15(30),CL(7,3),ST(28,3),
00101 3*      + UR(101,3),15(101),16(14),17(14),1A(7,16),IC(28,16),
00101 4*      + IC(101,8),NM(42,20)
00101 5*
00101 6*      C
00101 7*      DATA IB/1,5,/,12,19,1/,IE/4,6,11,18,33,33,/,11/1,5,19,35,49,60,64/
00101 8*      + 12/7,18,34,48,59,63,68/,IX/5712*0/,F/8562*0/,N/84*0/
00101 9*      C
00110 10*     READ(5,101) 15T
00110 11*     READ(5,102) 13
00110 12*     READ(5,102) 14
00110 13*     READ(5,103) 15
00110 14*     READ(5,104) 16,17
00110 15*     DO 1 I=1,7
00110 16*     1 READ(5,105) (1A(I,J),J=1,16)
00110 17*     DO 2 I=1,28
00110 18*     2 READ(5,105) (IC(I,J),J=1,16)
00110 19*     DO 3 I=1,30
00110 20*     3 READ(5,106) (IC(I,J),J=1,8)
00110 21*     DO 4 I=1,20
00110 22*     4 READ(5,106) (NM(I,K),K=1,4),(NM(J,K),K=1,4)
00110 23*     J=I+20
00110 24*     C
00110 25*     C
00110 26*     I=1
00110 27*     ISC=21102
00110 28*     11 READ(5,107,END=99) IS,IR,K
00110 29*     IF (IS.EQ.ISC) GO TO 12
00110 30*     I=I+1
00110 31*     ISC=IS
00110 32*     12 N(I,K)=N(I,K)+1
00110 33*     DO 13 J=1,68
00110 34*     13 IX(I,J,K)=IX(I,J,K)+IR(J)
00110 35*     GO TO 11
00110 36*     101 FORMAT(40,2/'4012')
00110 37*     102 FORMAT(28,3/'4012/2112')
00110 38*     103 FORMAT(40,2/'4012/2112')
00110 39*     104 FORMAT(28,12)
00110 40*     105 FORMAT(16,5)
00110 41*     106 FORMAT(8A5)
00110 42*     107 FORMAT(16,4X,68I1,1X,I1)

```

APPENDIX C

PROJECT STAR
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PROJECT STAR - FORTRAN PROGRAM - TEACHER QUESTIONNAIRE

FORTRAN STATEMENT

```

00241 43* 99 DO 10 I=1,6
00242 44* L=1+33
00243 45* II=10(I)
00244 46* JJ=10(I)
00245 47* DO 15 K=1,2
00246 48* DO 15 LL=11,JJ
00247 49* DO 14 J=1,88
00248 50* 14 IX(L,J,K)=IX(L,J,K)+IX(LL,J,K)
00249 51* 15 K(L,K)=K(L,K)+K(LL,K)
00250 52* 16 CONTINUE
00251 53* DO 18 I=1,39
00252 54* DO 18 K=1,2
00253 55* DO 17 J=1,34
00254 56* II=2+J-1
00255 57* JJ=II+1
00256 58* KK=J+34+(2-1)
00257 59* F(I,KK,1)=IX(I,II,K)/K(I,K)
00258 60* F(I,KK,2)=IX(I,JJ,K)/K(I,K)
00259 61* F(I,KK,3)=F(I,KK,1)+(6-F(I,KK,2))
00260 62* 17 CONTINUE
00261 63* C 18 DO 35 I=1,39
00262 64* C
00263 65* DO 21 J=1,3
00264 66* DO 19 K=1,7
00265 67* 19 CL(K,J)=0.
00266 68* DO 20 K=1,28
00267 69* 20 ST(K,J)=0.0
00268 70* DO 21 K=1,101
00269 71* L=15(K)
00270 72* 21 CR(K,J)=F(I,L,J)
00271 73* C
00272 74* DO 24 J=1,7
00273 75* II=11(J)
00274 76* JJ=12(J)
00275 77* JJ=JJ-II+1
00276 78* DO 22 L=11,JJ
00277 79* DO 22 K=1,2
00278 80* 22 CL(J,K)=CL(J,K)+F(I,L,K)
00279 81* DO 23 K=1,2
00280 82* 23 CL(J,K)=CL(J,K)/U
00281 83* 24 CL(J,3)=CL(J,2)+(6-CL(J,2))
00282 84* C
00283 85*

```

APPENDIX G (continued)

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PROJECT STAR

PROJECT STAR - FORTRAN PROGRAM - TEACHER QUESTIONNAIRE

FORTTRAN STATEMENT

```

00367      86*      DO 27 J=1,28
00372      87*      I1=13(J)
00373      88*      I2=14(J)
00374      89*      I3=J-11+1
00375      90*      DO 25 LL=11,JJ
00400      91*      L=15(LL)
00401      92*      DO 25 K=1,2
00404      93*      25 ST(J,K)=S1(J,K)+F(I,L,K)
00407      94*      DO 26 K=1,2
00412      95*      26 ST(J,K)=S1(J,K)/D
00414      96*      27 ST(J,3)=S1(J,1)+(6-ST(J,2))
00414      97*      C
00416      98*      DO 29 J=1,14
00421      99*      L=16(J)
00422      100*      M=17(J)
00423      101*      DO 28 K=1,2
00426      102*      28 DR(L,K)=(DR(L,K)+F(I,M,K))/2.0
00430      103*      29 DR(L,3)=DR(L,1)+(6-DR(L,2))
00432      104*      DO 30 K=1,2
00435      105*      DR(50,K)=(DR(50,K)+F(I,10,K)+F(I,13,K))/3.0
00436      106*      30 DR(101,K)=(DR(101,K)+F(I,14,K)+F(I,15,K))/3.0
00440      107*      DR(50,3)=DR(50,1)+DR(50,2)
00441      108*      DR(101,3)=DR(101,1)+(6-DR(101,2))
00441      109*      C
00442      110*      WRITE(6,108) (NM(I,J),J=1,4)
00450      111*      DO 31 J=1,34
00453      112*      K=J+34
00454      113*      31 WRITE(6,109) J, (F(I,J,L),L=1,3), K, (F(I,K,L),L=1,3)
00471      114*      WRITE(6,110) N(I,1)
00471      115*      C
00474      116*      WRITE(6,111) (NM(I,J),J=1,4)
00477      117*      DO 32 J=1,17
00480      118*      32 WRITE(6,112) (IA(J,K),K=1,16), (CL(J,K),K=1,3)
00483      119*      WRITE(6,113)
00486      120*      DO 33 J=1,28
00489      121*      33 WRITE(6,112) (IC(J,K),K=1,16), (ST(J,K),K=1,3)
00490      122*      WRITE(6,114) (NM(I,J),J=1,4)
00493      123*      DO 34 J=1,50
00496      124*      K=J+51
00499      125*      34 WRITE(6,115) (IC(J,L),L=1,7), (DR(J,L),L=1,3),
00502      126*      + (IC(K,L),L=1,7), (DR(K,L),L=1,3)
00505      127*      C

```

PROJECT STAR - FORTRAN PROGRAM - TEACHER QUESTIONNAIRE

FORTRAN STATEMENT

```

00575 128*      35 WRITE(6,116) (IC(51,L),L=1,7),(DR(51,L),L=1,3)
00575 129*      C
00575 130*      WRITE FORMAT
00575 131*      C
00602 132*      106 FORMAT('1',4A5/'0','ITEM',T10,'WEIGHT',T20,'RATING',T30,'INDEX',
00602 133*      + T61,'ITEM',T70,'WEIGHT',T80,'RATING',T90,'INDEX'/)
00602 134*      109 FORMAT(' ',13,5X,3(F6.2,4X),T61,13,5X,3(F6.2,4X))
00604 135*      110 FORMAT('0','NUMBER OF RESPONDENTS:',I7)
00604 136*      C
00605 137*      111 FORMAT('1',4A5/'0',T85,'WEIGHT',T95,'RATING',T105,'INDEX'/)
00606 138*      112 FORMAT(' ',16A5,T84,3(F6.2,4X))
00607 139*      113 FORMAT(' ', ' ')
00607 140*      C
00610 141*      114 FORMAT('1',4A5/'0',T37,'WEIGHT',T47,'RATING',T57,'INDEX',
00610 142*      + T107,'WEIGHT',T117,'RATING',T127,'INDEX'/)
00611 143*      115 FORMAT(' ',7A5,3(F6.2,4X), 7A5,3(F6.2,4X))
00612 144*      116 FORMAT(' ',7A5,3(F6.2,4X))
00612 145*      C
00613 146*      STOP
00614 147*      END

```

END OF COMPILATION: NO DIAGNOSTICS.

LMAP
 MAP2BR2H 03/31-09:49 NAMES
 START=013162, PROG SIZE(I/D)=5909, /19568

END MAP 10138 MSEC.

LXGT

Process Workshops

	Model	Change Process	Planning & Management
9/76		Change Agent Strategies	Group Orientation and Planning
12/76	Program Assessment and Writing Change Plans		
6/77	Standard Indicators Handbook Development Evaluate Standards and Change Plans	Change Agent Strategies -- Evaluation and Recommendation	Input into Project Design 1977-1978
9/14/77 & 9/26/77	Process Model Orientation Assessment Validation Strategies Withdrawal Process	Group Development Gaining Consensus Team Building --Communication Skills --Problem Solving --Confrontation Skills	Planning Matrix Early Childhood Education Project Adult Education Project
12/1/77 & 1/19/78	Setting Goals and Priorities Action Plan Writing Using the Standards Securing Commitment Analysis of Assessment Data		Time Management --Goal Setting --Setting Priorities --Setting Time Lines --Selecting Goal Reaching Activities
2/1/78	Action Plans -- Effective Strategies For Developing/Implementing		Hints to Help Your Principal Administer Assessment Appropriate Program --Self Concept and Learning Modalities
5/23/78 & 5/31/78	Action Plans	Role Clarification Delivery Systems Managing Change in STAR Schools	
9/7/78		The Change Process --Resistance and Acceptance --Variables Involved in Change --Roles of a Change Agent --Communication Skills --Motivation and Commitment	Planning for the Application of Change Skills
9/20/78 & 9/27/78	Evaluation - Phase VI		Evaluation of SRT's Differentiated Staffing Inservice Model Handbook
10/25/78 &	Introduction to Maintenance	Resistance to Change Overview of Monitoring --Written Monitoring --Observation Skills Application of Change Agency Skills	Language Projects Inservice Model
12/6/78	Action Plans for Securing Commitment Maintenance Plans	Communication Strategies That Work How to Develop an Independently Functioning Reading Team	Management Timelines The Assessment Plan Volunteer Training Reading Team Process Reading Placement Materials Inventory
5/14/79 & 5/21/79		Evaluation of Goals Individual School Narratives	Perceptual Survey Analysis

FOCUS WORKSHOPS

Planning Instruction	Coordination of Program	Language Development	Reading Pedagogical Procedures	Affective Domain/Positive Attitude	Curriculum Management
1/77 Assessment --Using Test Data To Plan An Effective Assessment Program --Developing Diagnostic Testing Plan --Using Test Data To Plan Program for Identified Groups Of Learners --Using Test Data To Make Pupil Program Compatible With Assessed Needs --Developing Program of Objective, Strategies, and Activities to Increase Students Skill In Taking Test 2/77 Goals and Objectives --Writing Goals and Objectives --Using Objectives to Plan Instruction	3/77 Coordination/Screening Committee --Establishment of Reading Team To Define, Assess and Coordinate the Reading Program --Identify Purposes, Functions, Membership and Procedures For A Screening Committee --Develop a Parent Involvement Program As Part Of the Team Approach	7/10/78 Linguistic Model Psycholinguistic Model Delayed Language Development Assessment Class/School Language Needs Implementation of Appropriate Language Program: Team Approach/Management Team Role Flexibility and Extension Goals and Objectives Action Plan Writing	2/21/78 Appropriate Program Learning Modalities Self-Concept Development 10/10/78 & 10/24/78 Content Reading Reading Textbook - SQ3R Style Finding the Right Textbook Identifying Concepts and Developing Vocabulary Developing Efficient Readers Providing Structure for Information Gathering and Thinking 10/13/78 Content Reading Directed Reading Activity Instructional Framework Development of Content Reading Lesson Plans Readability Selection of Materials	3/22/79 Overview of Links Between Self-Concept and Achievement Diagnostic and Prescriptive Approach to Developing Positive Attitudes in Reading Reading for a Problem Solving Purpose Designing Effective Teaching Strategies	10/25/78 & 11/1/78 Principal's Inservice --Description Of a Comprehensive Reading Program That Includes Both Skills and Behavior 2/6/79 & 2/14/79 Principal's Inservice --Developing A Book of Staff Instructional Behaviors Which Characterize Quality Reading Instruction --Principal's Leadership Role Regarding Supervision of Reading Instruction 5/15/79 & 5/22/79 Principal's Inservice --Developing General Guidelines and Specific Plans for Improving the Administrative and Supervision of Reading Instruction --Action Plan Writing "Change In Your Schools- How to Make It Happen" Open Ended Discussion

PROJECT STAR
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Planning Instruction	Coordination of Program	Language Development	Reading Pedagogical Procedures	Affective Domain/ Positive Attitude	Curriculum Management
4/77 Grouping --Develop Rationale For Grouping --Develop and Interpret Charts Aid In Total School Grouping --Describe and Illustrate Flexible Grouping --Explain Factors To Be Considered When Grouping 2/21/78 Assessment --Test Interpretation --Test Taking Skills --Population and Instructional Grouping			11/28/78 Content Reading Rationale for Reading in the Content Areas Historical Perspectives --Research --Issues --Solutions Skills Needed in Social Studies 1/4/79 , 1/10/79 & 1/25/79 Comprehension --Assumptions Affecting Comprehension --Features of the Learner Effective Ingredients of Teaching --Teaching Comprehension --Language Experience 4/6/79 Educational Programs That Work --Early Prevention of School Failure --New Adventure: Success Strategies for Reading and Language --School Volunteer Development Project --Richmond (Virginia) Follow Through Resource Center		

APPENDIX I

MARYLAND STATE DEPARTMENT OF EDUCATION
Division of Instruction

Workshop Rating Card

Workshop Title _____

Date _____ Workshop Director _____

NOTICE: So that the top portion of this rating card can be submitted without participant identification, please TEAR ALONG DOTTED LINE. Please return this rating card before leaving the workshop.

DIRECTIONS: For each statement please check one of the following ratings:
SD = Strongly Disagree; D = Disagree; N = Neutral; A = Agree; SA = Strongly Agree.

- | | | | | | |
|---|--------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------------|
| 1. The workshop objectives were clearly stated. | SD
☐ | D
☐ | N
☐ | A
☐ | SA
☐ |
| 2. The workshop objectives were relevant to participant interest and/or experience. | SD
☐ | D
☐ | N
☐ | A
☐ | SA
☐ |
| 3. The presentations supported workshop objectives. | SD
☐ | D
☐ | N
☐ | A
☐ | SA
☐ |
| 4. The workshop objectives were accomplished. | SD
☐ | D
☐ | N
☐ | A
☐ | SA
☐ |

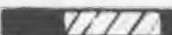
COMMENTS: Please use the back of this card if you wish to comment on the workshop.

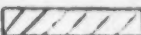
APPENDIX I'

MARYLAND STATE DEPARTMENT OF EDUCATION
Division of Instruction

Workshop Rating Card Summary

KEY:

 Range

 Mid 50%

 Average

Ref. No. _____

Workshop Title _____

Date _____ Workshop Director _____

NOTICE: So that the top portion of this rating card can be submitted without participant identification, please TEAR ALONG DOTTED LINE. Please return this rating card before leaving the workshop.

DIRECTIONS: For each statement please check one of the following ratings:

SD = Strongly Disagree; D = Disagree; N = Neutral; A = Agree; SA = Strongly Agree.

- | | | | | | |
|---|--|---|---|---|--|
| 1. The workshop objectives were clearly stated. | <div>SD
☐</div> | <div>D
☐</div> | <div>N
☐</div> | <div>A
☐</div> | <div>SA
☐</div> |
| | ☐ | ☐ | ☐ | ☐ | ☐ |
| 2. The workshop objectives were relevant to participant interest and/or experience. | <div>SD
☐</div> | <div>D
☐</div> | <div>N
☐</div> | <div>A
☐</div> | <div>SA
☐</div> |
| | ☐ | ☐ | ☐ | ☐ | ☐ |
| 3. The presentations supported workshop objectives. | <div>SD
☐</div> | <div>D
☐</div> | <div>N
☐</div> | <div>A
☐</div> | <div>SA
☐</div> |
| | ☐ | ☐ | ☐ | ☐ | ☐ |
| 4. The workshop objectives were accomplished. | <div>SD
☐</div> | <div>D
☐</div> | <div>N
☐</div> | <div>A
☐</div> | <div>SA
☐</div> |
| | ☐ | ☐ | ☐ | ☐ | ☐ |

COMMENTS: Please use the back of this card if you wish to comment on the workshop.

APPENDIX I"

MSDE/DIVISION OF INSTRUCTION

SUMMARY REPORTING SHEET FOR INSERVICE ACTIVITIES

Inservice Activity: _____

Ref. No. _____

Date(s): _____ Location: _____ Number Attending _____

Participant Rating of Attainment of Inservice Objectives*

N Responding	Attending Who Responded	Workshop Objectives							
		Clearly Stated		Relevant		Supported by Presentations		Accomplished	
		N	%	N	%	N	%	N	%

PROJECT STAR

101

GLOSSARY

162

GLOSSARY

Affective dimension:	The psychological concept that refers to a person's feelings, emotions, or degree of acceptance or rejection of some object.
Anonymity (provision for):	Evaluator action to ensure that the identity of subjects cannot be ascertained during the course of a study or in study reports.
Assessment:	The act of depicting the standing of an object on some variable of interest. For example, testing students and reporting raw scores.
Attrition:	Loss of subjects from the defined sample during the course of a study.
Audiences:	Those persons who will be guided by the evaluation in making decisions and all others who are interested in the evaluation.
Cognitive ability:	The mental capacity by which a person becomes aware or obtains knowledge of an object. It includes such processes as perceiving, recognizing, conceiving, judging, and reasoning.
Comparative experimental studies:	Studies that assign a program, project, or instructional material to one group of persons and compare their subsequent performance on some structured task to that of another group that was not exposed to the program, project, or instructional material.
Comparison group in experimentation:	A group to which subjects are assigned to create a basis for contrast with an experimental group (i.e., the group of people participating in the program or project being evaluated). The comparison group is not subjected to the treatment (independent variable), thus creating a means for comparison with the experimental group which does receive the treatment.
Computational skills:	Abilities to solve arithmetic problems through such operations as adding, subtracting, multiplying, and dividing.
Conclusions (of an evaluation):	Final judgments and recommendations.

Context (of an evaluation):	The combination of the factors accompanying the study that may have influenced its results. These factors include the geographic location of the study, its timing, the political and social climate in the region at that time, the other relevant professional activities that were in progress, and any existing pertinent economic conditions.
Criterion-referenced tests:	Tests whose scores are interpreted by referral to specifically defined performances rather than by referral to the performance of some comparable group of people.
Data:	Material gathered during the course of an evaluation which serves as the basis for information, discussion, and inference.
Data access:	The extent that the evaluator will be permitted to obtain data during the course of an evaluation.
Dependent variable:	A measure, such as a student's performance on a test, that is assumed to vary as a result of some prior influence, such as an instructional experience presented to the student.
Design (evaluation):	A representation of the set of decisions that determine how an evaluation is to be conducted, e.g., data collection schedule, report schedules, questions to be addressed, analysis plan, management plan, etc.
Dissemination:	The communication of the actions--by written, oral, and/or audio-visual reporting--of evaluators to foster knowledge of the evaluation findings among all right-to-know audiences.
Evaluation:	Systematic investigation of the worth or merit of an object, e.g., a program, project, or instructional materials.
Evaluator:	Anyone who accepts and executes responsibility for planning, conducting, and reporting evaluations.
Executive report:	An abbreviated report that has been tailored specifically to address the concerns and questions of a person whose function is to administer an educational program or project.

Executive summary:	A summary statement designed to provide an educational administrator with a quick overview of the full-length report on which it is based.
Experimental design:	The plan of an experiment, including selection of subjects, order of administration of the experimental treatment, the kind of treatment, the procedures by which it is administered, and the recording of the data (with special reference to the particular statistical analyses to be performed).
Experimental group:	A group of subjects assigned to receive a treatment (independent variable) the effects of which are measured (dependent variable). Often comparisons are made between these effects and those observed for a comparison (non-treatment) group.
Face validity:	The extent to which a test is made up of items that, under casual inspection, seem related to the variable to be tested.
Formative evaluation:	Evaluation designed and used to improve an object, especially when it is still being developed.
Generalizability:	The extent to which information about a program, project, or instructional material can be used to reach a valid judgment about other similar programs, projects, or instructional materials.
Hardware (data processing):	The physical components, such as a computer and a key punch machine, of a data processing system, as opposed to the instructional (content-related) components.
Information:	Descriptive or interpretative data about entities (tangible or intangible) and their relationship, related to some purpose.
Information sources:	The persons, groups, and documents from which data are obtained.
Instrument:	A measurement device adopted, adapted, or constructed for the purposes of the evaluation study.
Interim report:	A report issued during the course of the evaluation, prior to the release of the final report.
Internal evaluation:	Evaluation conducted by an evaluator from within the organization being studied.

Key punch:	A machine actuated by a keyboard and used to cut holes or notches in data cards.
Mean (arithmetic):	A measure of central tendency calculated by dividing the sum of all the values by the number of values.
Norm:	A single value, or a distribution of values, constituting the typical performance of a given group.
Object of the evaluation:	What one is evaluating, e.g., a program, a project, or instructional material.
Objective- referenced test:	A test whose scores are interpreted by reference to the objectives the test was designed to measure, rather than the performance on the test of some comparison group of people.
Operational definition:	Defining a term or object by stating the operations or procedures employed to distinguish it from others.
Overview:	A conceptual/introductory statement that gives essential definitions; provides a general rationale; and presents summarized procedures, common problems, and special difficulties that are applicable. An explication of the standard.
Pilot test:	A brief and simplified preliminary study designed to try out methods to learn whether a proposed project or program seems likely to yield valuable results.
Population:	All the persons in the group to which conclusions from a study are to be applied.
Post-test:	A test to determine performance after the administration of a program, project, or instructional material.
Pre-test:	A test to determine performance prior to the administration of a program, project, or instructional material.
Procedures (of an evaluation):	The various ways in which information is gathered, organized, analyzed, and reported.
Program evaluations:	Evaluations that assess educational activities which provide services on a cyclical basis and often involve curricular offerings. Examples include evaluation of a school district's reading program, a state's special education program, and a university's continuing education program.

Project evaluations: Evaluations that assess activities that are funded for a defined period of time to perform a specific task. Some examples are a three-day workshop on behavioral objectives, a two-year development effort, or a three-year career education demonstration.

Purposes (of an evaluation study): The objectives of an evaluation (e.g., to judge the relative merits of competing text books, or to monitor and report on how well a project plan is implemented) and the intended uses of its reports (e.g., to help teachers choose a text book or to help a school district carry out a special project).

Qualitative information: Facts and claims that are in narrative, not numerical form.

Quantitative information: Facts and claims that are represented by numbers.

Random sampling: Drawing a number of items of any sort from a larger group or population so that every individual item has the same (and independent) chance as any other to be chosen.

Reliable measure: A measure that provides consistent indications of the characteristics being measured.

Report: An account of what was done and learned in an evaluation.

Sample: A part of a population.

Self-report instrument: A device in which persons make and report judgments about the functioning of their project, program, or instructional material.

Standard: A principle commonly agreed to by experts in the conduct and use of evaluation for the measure of the value or quality of an evaluation.

Standardized test: A test composed of empirically-selected materials. It must have definite directions for use, adequately defined norms, and data on reliability and validity.

Statistic: Any value that expresses the end result of statistical manipulation of other values. It describes a sample and is typically an estimate of a parameter of the population from which the sample was drawn.

- Summative evaluation:** Evaluation designed to present conclusions about the worth of an object and recommendations about whether it should be retained or eliminated.
- System analysis:** The discovery and identification of sources of effort or variability in a system, the measurement of these errors, and the arrangement of system elements to improve system performance.
- Terminal:** A device connected to a computer by telephone lines that permits use of the computer at locations physically separated from the computer.
- Test re-test reliability:** The extent to which two administrations of the same test to the same group of subjects yield consistent results.
- Unit of analysis:** A single thing, person, or group that is a constituent and isolable member of some more inclusive whole; a member of an aggregate that is the least part to have clearly definable separate existence and that normally forms a basic element of organization within the aggregate; the least divisible element on which measures are taken and analyzed.
- Unobtrusive:** Performing evaluation operation in such a way as to attract as little attention as possible.
- Variable:** A characteristic that can take on different values.